BOSTON MEDICAL LIBRARY IN THE FRANCIS A. COUNTWAY LIBRARY OF MEDICINE

Nos. 1 to 156 may still be had, price 4d. each.] [Nos. 157 to date, price 2d. each.

# HEALTH

A WEEKLY JOURNAL OF

## DOMESTIC AND SANITARY SCIENCE.

"Reason's whole pleasure—all the joys of sense—
Lie in three words, HEALTH, PEACE, and COMPETENCE."—*Pope.*

EDITED BY DR. ANDREW WILSON, F.R.S.E. &c.

VOL. X.—No. 238. FRIDAY, OCTOBER 28, 1887. [PRICE TWOPENCE.
*Registered at G.P.O. as a Newspaper.*

BRAND & CO.'S
INVALID
SOUPS,
Potted Meats,
PRESERVED
PROVISIONS, ETC.

BRAND & Co.'s PRESERVED PROVISIONS SOUPS & SPECIALTIES FOR INVALIDS
ESSENCES of BEEF, MUTTON, VEAL & CHICKEN, BEEF TEA, TURTLE SOUP & JELLY, MEAT LOZENGES &c.
SOLE ADDRESS No. 11, LITTLE STANHOPE ST. MAYFAIR, W.

BRAND & Co.'s
A1 SAUCE.
A fine Tonic and Digestive.
An excellent Relish for "Fish, Flesh, or Fowl."

Under the direct Patronage of the British, United States, Canadian, and other Governments.

TO ANXIOUS MOTHERS.

TRADE MARK.

WOODWARD'S "GRIPE WATER,"
OR INFANTS' PRESERVATIVE,

Is the only REALLY SAFE and effectual remedy for all diseases and disorders of INFANTS and CHILDREN, viz., SICKNESS, DIARRHŒA, FLATULENCE, DIFFICULT TEETHING, and (the result of all these) CONVULSIONS.

This High-class Medicine has been established nearly a CENTURY, and is largely used by Medical Men in their own Families. This is the highest possible testimony to its value and safety. Owing to its pleasant taste, Children take it most readily.

From Dr. GORDON STABLES, M.D., C.M., R.N.:—"WOODWARD'S 'GRIPE WATER' *is the only safe medicine for Infants.* It is therefore recommended by the profession."

From A. G. MICKLEY, Esq., M.D., Lond., late House Surgeon, General Hospital, Nottingham:—"I believe WOODWARD'S 'GRIPE WATER' to be a medicine in every way suitable for the various disorders which so frequently afflict Infants and young Children. I have, therefore, strongly recommended its use for some time past."

"WOODWARD'S 'GRIPE WATER' is a Pharmacological preparation of great value. Knowing its exact composition, and having witnessed the happiest results from its administration, I can with confidence recommend it, *not only as a safe*, but an *efficient remedy*. It is, *par excellence*, the medicine for Spasmodic Colic in Infants, which it relieves with *surprising rapidity*." "F.R.C.S., L.M., L.R.C.P., L.S.A."

[The above letter, dated Sept., 1886, is from a medical gentleman in extensive practice in a large city in the North of Ireland.]

Woodward's "Gripe Water," in Bottles, 1s. 1½d. each, sold by the ARMY & NAVY STORES, Victoria-street, Westminster; and by all Chemists and Stores everywhere. Depot for London:—Messrs. SANGER, 489, Oxford-street.

SYMINGTON'S
"EDINBURGH"
COFFEE
ESSENCES.

*THE BEST IN THE MARKET.*

*Sold by most Dealers in Town and Country.*

*Should be in every Household.*

*If any difficulty in procuring supplies, nearest Agent's name will be given on application to*
*HEAD OFFICE—BEAVERBANK, EDINBURGH.*

THE PINE FOREST AT HOME.

All who suffer from **LUNG AND THROAT COMPLAINTS** should bear in mind that the atmosphere of

PINE, EUCALYPTUS, & CAMPHOR FORESTS

Can be SECURED AT HOME (thus saving an expensive journey abroad) by the use of

"SANITAS OIL"
AND THE
"SANITAS FUMIGATOR."

"SANITAS OIL" combines in itself the entire active principles generated naturally in these forests, as discovered by Mr. C. T. KINGZETT, F.I.C., F.C.S., and IS SINGULAR IN THIS RESPECT. Other preparations so represented should be avoided as useless imitations.

"SANITAS OIL" is manufactured under Letters Patent by THE "SANITAS" COMPANY LIMITED, and should be used in all cases of INHALATION and FUMIGATION.

E. MACDOWEL COSGRAVE, M.D., writes:—"I have found the inhalation of 'Sanitas Oil' peculiarly useful in cases of Phthisis and Bronchorrhœa."

"SANITAS OIL," in Bottles, One Shilling each.
"SANITAS FUMIGATORS," Three Shillings and Sixpence each.

THE "SANITAS" COMPANY, Limited, Letchford's-buildings, Three Colt-lane, Bethnal-green, London, E.

# E. WARD & CO.,

BRADFORD,

MAKERS OF

# SANITARY UNDERCLOTHING

OF EVERY DESCRIPTION, HAVE OBTAINED THE

**HIGHEST AWARD** given by the Sanitary Institute of Great Britain for the excellence of their productions.

DESIGNERS AND SOLE MAKERS OF THE

"HYGIEA CORSET" (Registered).

**WARD'S WOVEN COMBINATIONS**, in Twelve Different Textures. Prices for Summer and Winter qualities in pure Sanitary Undyed Wool, from 8s.

ALSO

**GENTLEMEN'S COMBINATIONS, Vests, Pants, Hose, &c., in various qualities.**

*WARD'S DIVIDED SKIRTS (Registered Pattern). INFANTS' HYGIENIC OUTFIT.*

Surgical Appliances for Ladies and Children, including WARD'S ANATOMICAL BELT (Registered) and other special patterns. Every description of Belt specially fitted to order where required.

PATENT SPIRAL ELASTIC SURGICAL HOSE, for Varicose Veins—highly recommended.

**LADIES' COMPLETE OUTFITS FOR CYCLING.**

*WARD & CO.'S SPECIALITIES ARE GUARANTEED OF BRITISH MANUFACTURE.*

Price Lists, Testimonials, and Measure Forms, on application.

"THE DRESS PROBLEM." A Chapter for Women. Post free from E. WARD & Co., 1s. "We can cordially commend this little *brochure* to the lady readers of HEALTH."—*Health, Oct.* 1st, 1886.

MANUFACTURER TO HER MAJESTY THE QUEEN

# Wm. Polson's CORN FLOUR.

The Original and First Manufactured in Great Britain.

HEALTHFUL AND DELICIOUS FOOD for Children and Invalids; THE BEST KNOWN MATERIAL for PUDDINGS, CUSTARDS, CAKES, BLANCMANGE, and a variety of delicious Preparations for the Table.

*Every Packet is Warranted Pure, and its genuine qualities are certified by the highest medical authorities in the kingdom.*

The *Lancet* affirms:—"It is preferable to most descriptions of Arrowroot, on account of its sweeter flavour." Dr. LANKESTER, Superintendent of Government Food Collection at Kensington, in a note to the Manufacturer, said:—"... I am so well satisfied with your Corn Flour that I have given directions for its use in my own family."

**WM. POLSON & CO., Paisley and London.**

# EDWARDS' DESICCATED SOUP,

Extract of Beef and Vegetables in a dry state.

1-lb. Canister, 1/3; ½-lb., 8d.; ¼-lb.. 4½d.; Sample Packet, 1d.

NOURISHING, APPETISING, PALATABLE. Consists of the finest Vegetables and Beef in a dry state. A delicious basin of Soup in a few minutes.

## EDWARDS' (White) VEGETABLE SOUP.

A VEGETARIAN PREPARATION. 1-lb. Canister, 1/3; ½-lb., 8d.; ¼-lb., 4d.; Sample Packet, 1d. Excellent Soup may be made with this purely *Vegetable* preparation, in combination with **Skimmed or Separated Milk.**

*** If you cannot obtain them otherwise, Two Sample Canisters will be sent post free for 18 Stamps, or Two Packets for 3½d.

ONE HUNDRED ECONOMICAL RECIPES for the preparation of Soups and made dishes with these Soups will be found in EDWARDS' ECONOMIC COOKERY, a handsome and valuable book which should be in every household. Send your name and address on a post card, stating where you saw this advertisement, when the book will be sent to you post free.

FREDK. KING & CO., LD., SOLE MANUFACTURERS,
Contractors to H.M. War Office, Admiralty, India Government, &c.,
**26, Waring-street, BELFAST; 6. Bishopsgate-avenue, LONDON, E.C.**
Wholesale Depôts: 15, Hanging-ditch, Manchester; 469, St. Paul-st., Montreal.

GOLD MEDALS—EDINBURGH, LIVERPOOL, 1886.

THE FINEST OF THE WHEAT — TRADE MARK.

# MARSHALL'S PREPARATIONS of WHEAT

## FAROLA. TRITOLA. GRANOLA.

Pure, Digestible, Nourishing Foods.

*THEY SHOULD BE USED IN EVERY HOUSEHOLD.*

## PTYALOID.

A Vegetable Digestive of Starch—The best aid in Dyspepsia.

JAMES MARSHALL, Ibrox Flour Mills, GLASGOW.

*Descriptive Pamphlet sent post free.*

SAMPLE PACKETS FREE FOR 6D. EACH.

**RHEUMATISM, NEURALGIA, DYSPEPSIA,**

Can be relieved and Cured by

# MASSAGE TREATMENT & BATHS

Scientifically applied at

6, GROSVENOR-ST., GROSVENOR-SQ., W.

EUCALYPTUS BATHS for GOUT, RHEUMATISM, DYSPEPSIA, AFFECTIONS of the LIVER, &c., are quite unique, and a specialité of Mrs. MAITLAND'S. They are prepared from a highly refined product of the American Eucalyptus Tree, and are stimulating, invigorating, refreshing, and produce a feeling of rejuvenescence and elasticity which is most delightful. In Bronchitis, patients feel great benefit from inhaling the vapour. The only known remedy for CORPULENCE and OBESITY, which improves the complexion, keeps up the tonicity of the skin, increases physical and nerve force, whilst reducing the weight, is the "MAITLAND" Treatment. Consultations 3 till 5, or by appointment. Particulars for stamped addressed envelope.

**Mrs. MAITLAND, 6, Grosvenor-street, W.**

# ◆ HEALTH ◆

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &c.

LONDON: *FRIDAY, OCTOBER* 28, 1887.


Contents of No. 238.


| | PAGE |
|---|---|
| Notes by the Way: By the Editor. | 49 |
| Original Essays:— | |
| Poisons from Animals. By Guy C. Rothery. First Paper .... | 50 |
| Cannibalism from an Economic Point of View. By Brigade-Surgeon W. Curran. Fourth Paper..... ..... | 52 |
| Personal Health:— | |
| Pinol. A New and Valuable Drug. | 54 |
| Toothpicks ..... | 54 |
| The Family Circle:— | |
| Hints on the Physical Rearing of Infants. By Mrs. Henry King-Parks. Second Paper .. | 55 |
| Chest Expansion and Consumption ..... | 56 |
| Healthy Houses:— | |
| House Construction in relation to Health. By George H. Blagrove — Sixteenth Paper. | 57 |
| Ventilation of Schools..... | 58 |
| Popular Science Papers:— | |
| Papers on Alcohol. Fourth Paper. Sedentary Men and Stimulants. By Dr. W. S. Searle .. | 59 |
| Economy of Food..... | 60 |
| Our Letter Box:— | |
| Rules for Corespondents ..... | 61 |
| Letters to the Editor:—Cereal Food for the Cold and Hungry —Plumbing Leakages .....61-62 | |
| Queries and Answers:—Replies: General, Sanitary, and Medical. | 62 |


## Notes by the Way

By the Editor.

"Health is the foundation of all our physical happiness."—*Herder.*

A new illustration of an old law, that of the influence of mind over body, has recently been given in the healing of wounds by mental impressions. In a recent account by Dr. Delbœuf, of Liége, I find certain interesting facts regarding this subject. We are all familiar with accounts of the wounds inflicted on themselves by African dervishes; but the statement which the narrators always make, that the wounds do not inflame, or may even be quite healed in twenty-four hours, probably often tends to discredit their whole description in the reader's mind. Dr. Delbœuf's observations now make these stories wholly plausible.

✣ ✣ ✣

It is well established that in certain mesmerised subjects a suggestion made during trance, that to a part of their body a cautery or a blister is applied, will produce, after due lapse of time, an actual blistering of the skin. The feeling of inflammation induced in the trance state produces in these persons a genuine inflammation. Dr. Delbœuf argued from this, that the feeling of pain, however useful in other respects, must itself be an inflammatory irritant, and went on to infer that the abolition of it from an actual wound ought to accelerate its healing.

He immediately thought of some mesmeric subjects whom he had made unconscious, and in whom he had often admired the rapidity with which the marks of punctures and pinchings disappeared, and proceeded to more systematic experiments which, so far as they go, seem to verify his theory perfectly. On a young woman whom he could make insensible by suggestion, he marked two corresponding spots, one on each arm, and made on each an identical burn with the hot iron, announcing to the patient that the one on the right should not be felt. The suggestion took effect; and the next day, when the bandages were taken off, and the left arm presented a sore with an inflammatory area three centimetres in diameter, the right arm showed only a clean scorch of the skin of the exact size of the iron (eight millimetres diameter), without redness or inflammation.

✣ ✣ ✣

On another subject similar results were obtained with burns and blisters, the spots chosen being near together on the same arm or on the neck. The experiments are few in number, and ought to be multiplied: but the reader will immediately see the vista which they open. Many of the results of the "mind-cure," and the strange fact, so long known, of opium controlling inflammations, are explained by Dr. Delbœuf's principle. So is the popular belief in "hardening" one's self by a little judicious indifference, and neglect of one's condition.

✣ ✣ ✣

Local pain is useful in leading us to protect the wounded part from mechanical abrasion,—several of Dr. Delbœuf's experiments were inconclusive, because the subjects, being insensible at the seat of their injuries, allowed them to get scraped, &c.,—but it has the drawback of exciting reflex changes of nutrition of an unfavourable kind. Rendering the pain of a wound unfelt prevents these reflex changes. Dr. Delbœuf, suggesting to a very sensitive subject that she should not feel a severe dental operation, was assured by the dentist that what he found most extraordinary in the whole performance was the absence of the salivary secretion which would usually have accompanied it. These experiments only serve to show how rich is the field of observation in connection with the power of mind to overrule even the hurts and pains of the body.

✣ ✣ ✣

*Truth* lately had the following remarks on chlorodyne: "I wish very much that the *Saturday Review* articles upon 'Quack Medicines' were being published in a paper which somebody reads. The one on chlorodyne is excellent. But as no one can be expected to purchase


NATURAL MINERAL WATERS OF

*STATE SPRINGS.* CELESTINS. HAUTERIVE.

VICHY

*STATE SPRINGS.* GRANDE-GRILLE. HOPITAL.

These WATERS form an agreeable Beverage, taken alone or mixed with Wine or Spirits.

**BOTTLED under the immediate supervision of Government Officials, their Genuine Character is ABSOLUTELY GUARANTEED.**

ANNUAL SALE, SIX MILLION BOTTLES.

SOLE ENGLISH BRANCH:

INGRAM & ROYLE, 52, Farringdon-st., London,

Wine, Spirit, and Natural Mineral Water Merchants.

the *Saturday Review*, I think I shall be doing a service to humanity by extracting the composition of chlorodyne:—

Six drachms of chloroform.
Half a drachm of tincture of capsicum.
Three minims of oil of peppermint.
Eight grains of morphia (sixty-four doses).
Twelve drops double strength prussic acid.
One drachm of tincture of Indian hemp. (*Bhang*, or Indian hemp, is a poison used throughout the East to produce insensibility. It is the *Benj* of the 'Arabian Nights.')
One drachm of treacle.

The 4s. 6d. bottle accordingly contains poison enough to kill eight persons."

✣ ✣ ✣

To several points in the above statement it is necessary and just to take grave exception. In the first place, the formula as above given (in the *Saturday Review*) cannot be that of the genuine chlorodyne. As has been pointed out, if the ingredients quoted were weighed, the bulk would amount to less than a fluid ounce, and only slightly in excess of an ounce, if measured. The "chlorodyne" so compounded would be immiscible; and, more serious still, the morphia-strength of it would be twice that of a very well known recipe (Martindale's), eight times that of the British Pharmacopœia, and thirty-two times that of Squire's chlorodyne! The formula given by the *Saturday Review*, and quoted (with commentary) by *Truth*, is indeed a highly dangerous preparation, and infinitely more so, for the reasons just specified, than that of Collis Browne or of the other makes above-mentioned.

✣ ✣ ✣

Secondly, the fact that chlorodyne is not a "quack" medicine in any sense, but a well-known and, by medical men, highly-esteemed anodyne preparation, should be taken into account. It has been prescribed for many years, and with signal success, for such ailments as diarrhœa, cholera, and allied diseases. A medicine which has enjoyed this reputation cannot, in bare justice, be described as a "quack" preparation.

✣ ✣ ✣

As far as its use by the public is concerned, in the second place, I fail to see the difference between the case of chlorodyne and, say, Gregory's Powder. The composition of each is known, and the uses of each preparation are perfectly well recognized. To say, lastly, that "the 4s. 6d. bottle (of chlorodyne) contains poison enough to kill eight people," is simply an attempt to prejudice the case by dragging a "red-herring" opinion across the track of the argument. We do not stigmatize carbolic acid as a "quack" preparation, although it is of deadly character. Why, then, abuse chlorodyne? Neither substance is meant to be used by children or by imbeciles.

✣ ✣ ✣

On the argument that because an excessive dose of chlorodyne taken incautiously may produce death, it should be tabooed, we might interdict the use of lucifer matches because of the danger from fire attending their employment. All I need add in the present instance is, that the public are by no means so foolish in their use of such a remedy as Dr. Collis Browne's chlorodyne as alarmist writers would have us believe. As far as I am personally concerned, I know of no medicine which, travelling at home or abroad, I would more readily carry with me as a solitary preparation for use under most exigencies than chlorodyne. I have personally experienced the benefits derivable from its use, when far removed from all medical and pharmaceutical aid.

# Original Essays

"Life is not to live, but to be well."—*Martial.*

## POISONS FROM ANIMALS.*

By Guy C. Rothery.

FIRST PAPER.

### The Ptomaines, or Cadaveric Alkaloids.

In treating of the subject of the Animal Alkaloids, now made known to us as the ptomaines and leucomaines, a few lines of preface to these papers may not be inappropriate, dealing as they do with one of the most startling discoveries made in modern scientific biochemistry, and with research fraught with the utmost importance to humanity at large. We must, however, content ourselves with a rapid review, as the space at our disposal will not permit our giving the full and critical survey the question merits. To put our readers in possession of the broad facts, and point out their relation to everyday life, is our present task.

Alkaloids, then, are certain chemical compounds possessing the greatest interest for pathologists, being all more or less remarkable for their toxic and other physiological effects. These compounds are "a group of organic bodies that possess alkaline properties, . . . characterized by combining with acids to form salts." Alkaline poison-bases may be briefly divided into vegetable, animal, and natural or artificial. The artificial alkaloids are those which have received most attention; their manufacture, for medicinal purposes, having given rise to an important and ever increasing industry. The vegetable alkaloids are numerous, varied in form and quality, and demand the most careful study at the hands of physicians and medico-legists.

We need not here dwell at any length upon those powerful alkaline agents, the *conine* of the hemlock, the *nicotine* of the tobacco, or the *aconitine* of the monkshood; merely stating in passing that the presence of vegetable alkaloids, in small quantities, need not always imply danger to human life. Every human being, almost without an exception, daily absorbs a certain quantity of alkaloids, in the form either of the *theine* of tea, the *caffein* of coffee, or the *theobromine* of cocoa, not to speak of the *nicotine*, a small percentage of which is inevitably absorbed by every ardent smoker. On the other hand, the smallest atom of *conine* or *aconitine* in the human economy is sufficient to produce serious symptoms of violent poisoning. We only make mention of these vegetable poisons here because they naturally belong to our subject. Many of the vegetable alkaloids closely resemble, both

*1. A Treatise on the Animal Alkaloids, Cadaveric and Vital; or the Ptomaines and Leucomaines Chemically, Physiologically, and Pathologically Considered, in Relation to Scientific Medicine." By A. M. Brown, M.D. Baillière & Co.

2. "The Animal Alkaloids: Ptomaines, Leucomaines, and Extractives, in their Pathological Relations." By Sir William Aitken.

3. Armand Gautier's "Bulletins de l'Académie de Médicine."

Jensen's Cod Liver Oil is acknowledged as the best because it is the only Oil made from absolutely fresh Livers. It prevents all Coughs, Colds, Asthma, Bronchitis; it makes the Digestive Organs act, and is the only remedy of any value in cases of Consumption; it is sweet and pleasant—cannot by any possibility cause any aftertaste, while all its nourishing virtues are retained. Of all Chemists, &c., in bottles, each Wrapper bearing the Registered Trade Mark (an Iceberg) if genuine, at 1s., 2s., 3s. 6d., and 6s. 6d.; or, post free, of Hertz & Collingwood, 101, Leadenhall-street.

in chemical constitution and physiological effects, the comparatively recently discovered animal alkaloids. As some of these latter have properties closely allied to those of *strychnine* or *atropine*, others to that of *morphine*, it is often difficult to determine the origin of such bases in post-mortem examinations. Cadaveric alkaloids, or those obtained after death from animal bodies, have more than once been mistaken for their plant-neighbours.

It is true, the actual detection and definition of these cadaveric or *post-mortem* alkaloids (or *ptomaines* as they are also called) now dates back for some years; for a long time, however, too little importance was attached to the discovery. Selmi advanced in 1872 a distinct statement that, as a crowning effort of his previous labours, post-mortem analysis had established beyond a doubt that the stomachs of persons who had died from natural causes, after a brief lapse, contained substances with a close affinity to vegeto-alkaloids. His conclusions were slighted. Research went on apace in France, in Italy, and in Germany. Soon the continental Academical bodies and independent toxicologists were satisfied of the existence and probable importance of these post-mortem poisons.

There was, in fact, no room for doubt. As early as 1822, Messrs. Gaspard and Stich had found venomous principles in cadaverous extracts. Then followed numerous *mémoires* from other workers in the same field; Selmi in Italy, Gautier, Boutmy, and Brouardel in France, were among the foremost. M. Gautier was first attracted to the subject by observing that putrid albumenoids were strongly ammoniacal. Further investigation was rewarded by the discovery of an alkaline liquid, trimethylamine. This opened a wide field for speculation and careful research. Observing germ-action on albumenoids during putrefaction, he was soon enabled to demonstrate that during the process alkaloid substances, fixed and volatile, were formed. This, further experiments, carried on simultaneously but independently in many quarters, confirmed.

Let us now look into the origin of these animal poisons. Under ordinary circumstances loss of heat and discolouration sets in soon after death, and in quick succession the various parts of the body begin to deteriorate, bacterial (or germ) action ensues, giving rise to fermentation and putrefaction. But the course of decomposition is neither uniform nor general; parts of the body are attacked earlier than others, and the effects differ. The albumenoid or once living material is about the last to succumb to this encroaching fermentation; but when it does, the action is rapid and the change complete. From being insoluble in water, albumenoids become, under active fermentation, easily so. Soon after this stage, certain gases having been freely given off in the process (notably carbonic and nitrogen), the substance changes, and under analysis gives many crystallizable bodies; among others, cadaveric alkaloids. These crystallized alkaloids are sometimes obtained by decomposition of putrid fleshy substances dissolved in alcohol. It is worthy of notice that the too universally accepted sign of putrefaction, viz., objectionable odours, is by no means a safe guide; for very often there may be advanced stages of putrefaction without these evil smells, the matter depending entirely on the special character of the animal tissues. Fish becomes a prey to fermentation and putrefaction much earlier than flesh.

We need not go deeply into the various methods adopted in order to extract the cadaveric alkaloids for analysis and classification. It is sufficient to mention that many methods of extraction are adopted, necessarily differing with the substance under examination. Alcohol, ether, benzine, and chloroform are used. Those who wish to investigate further will find ample directions in the books of Doctor Brown and M. Gautier.

We now pass on to the chemical properties and physiological effects of these cadaveric alkaloids.

"The ptomaines are bases solid or liquid," says Dr. Brown, "very alkaline, and which combine with strong acids, not as the amines do—the salts of which are dissociated by water—but in the same manner as the powerful metallic bases. They absorb to saturation the strong acids, sometimes attracting carbonic acid of the atmosphere. According as they are solid or liquid in their properties, they differ in many respects, so much so that they come under two categories, as in the case of the vegetable series of alkaloids. The bases of the one class, liquid, volatile, and of an odour, *sui generis*, contain no oxygen; those of the others are oxygenous, solid, and crystalline.

"The liquid ptomaines possess a virous, cadaveric odour, occasionally suggestive of musk or odoriferous plants. It is possible that between the products of bacterial putrefaction of animal tissues and the perfumes of vegetable cells of flowers, similarity is not altogether accidental. As M. Gautier surmises, the resemblance has a deeper basis of reality than might at first appear. The liquid ptomaines are soluble in alcoholic ether.

"The solid ptomaines are white, generally crystalline, very soluble in water, insoluble in liquids such as alcohol, benzine, chloroform, which readily dissolve substances rich in carbon. The solubility of these ptomaines is, however, disturbed by the presence of impurities, and amylic alcohol which dissolves but slightly pure *neuridine*, for example, on the contrary, dissolves it in notable quantity when the bases are blended with extractive matters."

The ptomaines have, as we see, been broadly divided into non-oxygenous and oxygenous alkaloids, the former being much the most common, and may be observed throughout the process of putrefaction. The second group is, perhaps, the most interesting, as it forms a kind of connecting link between the cadaveric and vital alkaloids. From the *paravoline* ($C^9\ H^{13}\ N$), extracted from horse-flesh, mackerel, &c., to the *cadaverine* ($C^5\ H^{16}\ N^2$), there are a great variety, though all possess a strong family likeness. The oxygenous alkaloids are more complex in their composition. Both groups are toxic.

Their action on the vital system is varied and very powerful. Experiments tried upon frogs proved their highly venomous powers. After a minute subcutaneous injection the pupil was observed to dilate, then contract; tetanic convulsions were soon followed by complete loss of muscular action; while breathing became laboured, the action of the heart increased. An injection in a dog produced irregular contraction of the pupil, marked heat, and paralysis, diminished breathing, somnolence, followed rapidly by convulsions and death. The most remarkable phenomena, however, was that the dog under the effects of cadaveric alkaloid poisoning lost all muscular contractility, even when the electric current was brought into play. M. Gautier, experimenting with *hydrocollidine* ($C^8\ H^{13}\ N$), on sparrows, obtained the following data: The most minute atom introduced beneath the skin produced vomiting, paralysis, convulsions, and death. *Mydaleine* excites diarrhœa, vomiting, intestinal inflammation. *Neurine* induces abnormal secretion, diarrhœa, quick but laboured breath-

ing, convulsions, and death. As a rule, these toxic alkaloids, absorbed through the circulation, act directly on the nervous system, affecting the heart and muscular structure generally.

Such are the effects observed when the lower animals are suffering from cadaveric alkaloid poisoning. The same symptoms are present when man himself falls a victim to these insidious poisons. Such celebrated toxicologists as Selmi in Italy, Otto and Lieberman in Germany, were among the first to draw active attention to the ptomaines in death in relation to toxicology, and apply their knowledge in cases of medico-legal difficulties. Later, on several occasions Brouardel and Boutmy were able to prove that the supposed victims of criminal poisoning had in reality succumbed to ptomaines, accidentally and unwittingly introduced during life. In the early stages of this interesting inquiry, Stas and Draggendorff, two German professors, perfected methods for detecting ptomaines in the human system, methods which enabled the alkaline bases to be separated and subjected to successful analysis. MM. Brouardel and Boutmy were entrusted with a delicate case of wholesale poisoning. A family, numbering several members, had been taken seriously ill, showing all the symptoms of violent poisoning, soon after dinner. One of them died. Careful analysis, on the Stas method, of the excreta and the organs of the dead man betrayed the presence of powerful toxic ptomaines. Enquiries soon elicited the fact that the family had partaken of a stuffed goose. In the *debris* the experts again found ptomaines, closely resembling the vegetable alkaloid *conicine*. Here it was evident that the over-kept goose was the cause of the accident. M. Gautier, who had been diligently at work in his laboratory, came forward with some valuable data as to the proper and surest ways of detecting and separating ptomaines. He proved that many ptomaines, under the influence of many reagents, would assume precisely the same peculiarities as those alkaloids of vegetable origin, until a final test would prove the difference. For instance, in the case of an alkaloid separated from a corpse which had been eighteen months in the water, the test paper was turned blue, precipitated Meyer's test, and became violet when mixed with nitric at 60°. All these phases were equally characteristic of morphine, atrophine, veratrine, &c. Subjected to further tests, the similarity still persisted, changing in colours from brick-red, through violet, to cherry-colour under different influences, until, when subjected to the contact of ferricyanide and perchloride of iron, it became Prussian blue in tint, and betrayed its nature. Such are some of the difficulties that have to be struggled against, carelessness or inattention often leading to serious mistakes.

As far back as 1883, Dr. Brown recognized the possible physiological importance of these animal poisons. Speaking of the vexed question of vaccination, he said, "How are we to account for those complex and alarming disorders of the cerebro-spinal nervous system in nurslings following vaccination by the Jennerian method, and which sometimes terminate fatally with such rapidity as to disarm suspicion as to probable cause? This terrible increase—according to the Registrar-General's report—of infantile mortality, attributed to cerebral meningitis (popularly "brain-inflammation") is its idiopathic and more obscure form; sympathetic or irritative convulsions, tetanus, and the like, supply a list illustrative of such a nature and too often misread. A probable explanation, though unsuspected even by our experts in pathology, lies in the toxic physiological action of the cadaveric alkaloids—the ptomaines—to whose place, in the pathology of vaccination, animal or human, by whatever mode, the attention of the scientific interested in the question is for the first time directed. I believe this is the case; and it need not surprise us if an inference so important is destined shortly to be brought within the ranks of demonstrated facts."

So far, and judging from what M. Gautier, backed by Brouardel, Peter, and Sir William Aitken, have already demonstrated to us, Dr. Brown was decidedly on the safe side when he uttered those words. His conjectures seem to be fully justified, and sets finally at rest one of the most difficult and delicate questions in connection with vaccines.

These discoveries, though at present hardly within the range of the mass of the people, really concern us all vitally. The knowledge acquired, if practically applied, cannot fail of bringing about good results. In the meantime, the labours of M. Gautier in the laboratory, of M. Peter as a clinical demonstrator, of Dr. Brown and Sir William Aitken, enable us to appreciate the magnitude of the question. Again are we brought face to face with the absolute necessity of common-sense rules of living. To eat over-kept meat in hot weather, to hang our game until nearly putrid, to indulge in stale fish, more especially crustaceans, is to run serious risk. High or stale food is merely food on the high-road to putrefaction. The dealer who sells such food is veritably as guilty of injury to the person, of manslaughter even, as the armed suburban burglar or Thames Embankment garroter. Even tinned meats come under the same law. When once these matters are thoroughly understood, much mischief will be prevented.

Having gone thus far with Dr. Brown, M. Gautier, and Sir William Aitken, we will discuss in another paper that yet more difficult and important branch of the subject, the study of the vital alkaloids.

## CANNIBALISM FROM AN ECONOMIC POINT OF VIEW.

By Brigade-Surgeon W. Curran.

FOURTH PAPER.

I have already mentioned the exhibition or act of this kind that occurred in the Castle of Carrickfergus in 1316; and we know from Motley and others that mothers fed on their dead children during the siege of Paris, under the Bearnaise, in 1590. We also learn from the same source that when Sluys was besieged by Maurice of Nassau, in 1604, and after the garrison and its inhabitants had quite exhausted their supplies of cats, dogs, rats, and old saddles, they then took to eating one another. "The small children disappeared rapidly, we are told, in numbers," and similar scenes were, we know, enacted during this period elsewhere in that country. Many starving wretches maintained themselves in this way, according to Gardiner, during the Thirty Years' War in Pomerania, and a woman had been known there to feed on the flesh of her dead child.

So was it also with the Persians in Ispahan, the Austrians under Melas in Genoa in 1800, as well as with our own Hindustanee Sepoys or followers on their retreat under Elphinstone from Cabul in 1839-41. The Chinese also maintained themselves for some time in Kashgar by a similar expedient; and as to what may be roughly called shipwreck-cannibalism, is not the whole question exhausted in the case of the Crown *v.* Thomas

Dudley and Edwin Stephens, the master and mate of the now famous yacht, the "Mignonette"?

Finally, and not further to encumber our pages with details of this kind, so sweet is life even under the circumstances here contemplated, that the Crusaders who were besieged by Saladin, in Antioch, "exhumed the bodies of the Saracens, and to support life disputed with death for his prey." "The Huguenots resorted," according to Buckle, "to the graveyards for food during the siege of La Rochelle," and a far greater authority than either or all these has told us that "there is no new thing under the sun." I have no doubt but that under similar conditions we would do the same ourselves to-morrow.

This belief or assumption is strengthened by the fact that once a cannibal always a cannibal would appear to be the law of this practice. The pertinacity with which it is adhered to by those who once indulged in it, is one of its most striking features.* The estimation in which this article is held by many tribes and peoples, and the ready sale it commands in many savage or semi-civilized markets, are of themselves, to my mind, proofs positive of its peculiarly attractive flavour, or greater nutritional value; and as to the other peculiarities of these peoples, speaking of the people of Manyuema, Cameron says that "they seemed very affectionate among themselves, and decidedly more prolific than any other race I had seen in Africa." These maligned tribes were capable, says the Count de Brazza, of the most generous sentiments; not only did they show no desire to eat himself, but they had shown him a devotion to which he owed his life. In one case a Fan Chief who had gone to a hostile tribe to seek for help for this sick explorer, offered himself as a hostage for the safe return of the escort he solicited on his behalf. He thereby nearly forfeited his own life, but he obtained his escort and saved his friend, and herein we see that there is a good deal of humanity in human nature, and that, in short, one touch of nature often makes us all of kin everywhere.

The fact that expeditions are organized and forays sent forth in quest of this article, in countries that abound with game or that produce many nutritious fruits and roots, seems to me to support the same thesis; and we know that certain portions of the carcasses that are thus acquired are reserved for the chiefs, the women, or other favourite members of the community. We also know that some of these chiefs will consume no other food than this; and while it is, or was, called by the New Zealanders† "long pig," "so highly did the Fijians esteem it that the greatest praise they could bestow on a delicacy was to say that it was as tender as a dead man." One of these savages laughed to scorn Cook's remonstrance on the point. He told him flatly that the flavour of pork was nothing to it; and we learn from another traveller that "there is no more delicious morsel than the ankle-bone of a two-year-old child eaten cold."

* See Prof. Ribot's "Heredity," pp. 45 and 88, for very striking instances of this overmastering habit or indulgence.

† Dr. Thomson says expressly ("Story of New Zealand," vol. I., p. 147) that "they had a strong liking for it, and all admit that its smell and taste were grateful," and he quotes a native teacher to the effect that, "Although I am not an old man, I have eaten human flesh; it was sweet." "Several men have told me," he adds, "that human flesh tastes like fresh pork, and others that it has the flavour of veal," and "one of the natives of Tasmania bit and gnawed the bone which Mr. Banks had taken, drawing it through his mouth and showing by signs that it had afforded him a delicious repast" ("Captain Cook, &c.," by W. H. Kingston, p. 90).

*De gustibus non est disputandum* has become a household word amongst us; and we know from the history of our own land that when one of the daughters of the family that was burnt in Scotland in the fourteenth century for this offence was being led to execution, she cried aloud to those who reviled her and said, "Give me credence and trow me, if ye had experience of eating men and women's flesh, ye wold think it so delicious, that ye wold never forbear it again." So far for the antiquity, as well as for the universality, of this practice; let us now see how far these qualities or considerations admit of being applied to the solution or the mitigation of our own food or other economic requirements.

Of the existence of the former there can, I think, be no reasonable doubt, and as to the latter the quotations or references I have or will adduce ought, I think, suffice to settle that. Many other proofs of both might be given, were we to discuss the other causes of this practice, but I must not forget my heading or discuss this matter from any other standpoint than that of food; and if we look closer into the matter we will find that—so far as it has been dealt with by chemistry—human flesh differs in no very material respect from that of its higher congeners, the ox and the hog, that perish.

So well aware of this are our friends, *messieurs les sauvages*, that they do not hesitate to substitute, on occasion, one for the other. They prefer, however, as we have just seen, the former; and they thereby show their respect for the example that was once set them by that hairy arboreal quadrumanous gentleman who cleared the way for their and our common ancestry. Be that, however, as it may, so little is actually known about this "party," or about these primitive peoples, that we ought not to dogmatise about them. We can only draw our own inferences.

All we can do, in short, is to fall back on the testimony of the travellers or explorers we have already referred to, and be guided by the teaching of analogy and deduction. They are, however, pretty clear upon the point; and we know as a matter of fact that "cannibalism accompanied by parricide was not infrequent among the wretched Fuegians." We also know that these and other savages are, or were, so depraved as that, scorning the instincts of nature, as well as the helplessness of infancy and age, they sacrificed their old women, and, in some instances, also their very babes, to fill their own famishing bellies or preserve the life of a favourite puppy-dog. *Ex uno disce omnes;* and the more I read or reflect on this point the more satisfied am I as to the antiquity and universality of this always odious practice.

Symington's Essences.—It is very gratifying to find that these Essences are being so largely used by the readers of Health. Many letters from various parts of the kingdom, expressing high appreciation of both the Pure Coffee Essence and Coffee and Chicory Essence, have been received by me since last I had occasion to notice Messrs. Symington's preparations. I cannot recommend too strongly, or too frequently, these Essences. The delicate aroma of the fresh roasted bean, welcome at every breakfast table, is to be found in Symington's Essences in perfection, which alone testifies to the high quality of coffee bean used by this eminent firm in their preparations; and it is only due to their credit to mention, that though the coffee bean has gone considerably up in price, the excellence of quality and standard prices continue unaltered.

# Personal Health

"Be timely wise;
With health all taste of pleasure flies."—*Gay.*

## PINOL.

### A NEW AND VALUABLE DRUG.

There is a pine growing in the Alps known as the *pinus pumilio*. Some of the trees grow in the valleys and attain a goodly size, while others have their *habitat* in the snow which always covers the Alpine peaks, and are merely shrubs. It is from the needles of the shrubs that Pinol is derived. In the early morning the residents of the Alpine villages may be seen ascending the mountains to gather pumilio pine, with which their arms are filled when they return towards evening. All that one of these poor climbers can gather in a day will only make a very small phial of Pinol, which is, in fact, the oil or essence distilled from the pumilio in factories erected in the district for the purpose of manufacturing pine products.

The medicinal value of the pine-tree has long been known, but none equals the pumilio shrub growing at the snowy heights of the Alps. Years ago Dr. James Brown wrote in his great work on "Arboriculture," "The *pinus pumilio* contains a fluid giving off a very fragrant smell, which is different in its perfume and qualities from the resin or fluid of any other pine-tree." It would seem to be a very old custom for those afflicted with lung-ailments and rheumatic troubles to betake themselves to pine forests. The exhalations from the pines were recognized to be hygienic and curative, and the therapeutic properties were attributed to ozone, but are now assigned to the "hydrogen peroxide" set free, which is, indeed, one of the most useful of all agents in cleansing purulent cavities, as in abscess in the upper jaw.

The medical use of the Pumilio Pine Products has become quite popular in Germany, Austria, and other countries. Pumilio Pine Baths and Pine Inhalation Rooms are to be found in active operation at Homburg, Ischl, Baden-Baden, Riechenhall, and, indeed, in most of the principal health resorts of the continent. Some of the resorts are under men like Hæber, Von Liebig, Burdack, Neman, &c.

It is probable that Pinol is in no way so generally useful as when employed in inhalations. In chronic catarrhal affections a few drops of it poured into the water-bottle of Vereker's or Burroughs' Chloride of Ammonium Inhaler, and inhaled with the requisite neutral fumes, constitute the most valuable of all our therapeutic resources. Pinol thus used imparts to the wonderful ammonium vapour the delightful fragrance of the choicest of pines, and the medicinal qualities as well, and is to be specially recommended in cold in the head, influenza, sore throat. Singers, public speakers, elocutionists, and those who require to keep the voice in good condition should bear this treatment in mind.

Pinol may also be used in a steam-inhaler, as Codman & Shurtliff's, or in a spray apparatus. It is frequently used with good effect by pouring twenty or thirty drops into half a pint of boiling water in a basin, stirring well, and then adding another half pint of boiling water. Then, by enveloping the head and surrounding the basin with a towel, the vapour may be inhaled for a few minutes. This should be repeated several times a day.

By sprinkling a little of the Pinol on a piece of blotting-paper, &c., the atmosphere of a room becomes like that of a pine forest, redolent with the most refreshing fragrance, and possessing specific antiseptic medicinal properties, especially against germs of disease. It may also be employed for fumigation and as a gargle diluted with warm water. Its fragrance is preferred by many to the floral perfumes, and it is valuable as an embrocation in bruises and slight injuries. In chronic renal affections it may be taken internally in three-drop doses on sugar or in water. We shall have occasion to refer to baths medicated with this remedy, and its uses in gout and rheumatism, on a future occasion.

## TOOTHPICKS.

The wooden toothpick, let it be understood, is no small thing in the industrial activity of Maine (U.S.). The original wooden toothpick man is said to be Charles Forster, of Strong, Franklin County. He has done more for the teeth of America, it is said, than any other man under the sweep of her eagle's wings. He whittled the original box of Yankee toothpicks, but he copied the art from natives of South America, where he was a merchant years ago. The South Americans picked their teeth with whittled-out splints. Forster sent a box to his wife in the United States as a curiosity. A hotel man got hold of them and sent to Forster for a box, and the latter whittled them out and filled the order. More orders came, and he began to get busy. Very soon he had natives whittling out toothpicks for hotels all over the United States. He moved home and opened up a branch office, and in 1860 began making his toothpicks by machinery.

The first year he sold 65 cases containing 250,000 toothpicks each. Now he sells 30,000 cases a year. He is thought to make three-fifths of all the wooden toothpicks made in the country. With his primitive machinery a boy could grind out one toothpick at a time, while one operator can now turn out 15,000 toothpicks a minute. He has sold 200,000 dols. worth of them within the last two years. Twenty girls are kept busy every day packing them. The machines are very finely constructed of case-hardened steel, and Forster is thought to have expended 50,000 dols. on his patents in litigation since he started the manufacture. It is only recently that he has perfected machinery which he regards capable of turning out as good an article of toothpick as can be made by hand. The past year he worked up 1,000 cords of birch and poplar, and expects to double the product next year. The business is said to be in its infancy only.

A new artificial cork has been made by Potel, a German scientist, from a mixture of glue, glycerine, and tannin. It is elastic, impervious, strong, and durable, and very cheap. The mass is also applicable to other purposes.

Defective mental occupation begets—by way of bad hours, alcoholism, a love for poor literature, and self-indulgent habits—silliness, self-consideration, egotism, hysteria, hypochondriasis, and progressive feebleness of mind, memory, and understanding. Ten talents may earn another ten; or, *per contra*, they may be abused or lost, with character to boot, by simply being laid aside or hid in a napkin; for it is not the man with *one* talent only that may call upon himself the strong disapprobation of his Lord. To use the powers we have, and incite others to do the same, is a part of our work in the prevention of disease.

LUNG TONIC

*SAVE YOUR LIVES BY TAKING*

# OWBRIDGE'S LUNG TONIC,

## THE MIGHTY HEALER.

*It has a power over disease hitherto unknown in Medicine.*

*Are you at all Weak-chested, or inclined to be Consumptive, with just a touch of Cough now and then?*

*"Try this Wonderful Medicine." The Cough and Weakness will disappear as if by magic, and you will feel a strength and power you never had before.*

**HAVE YOU A COUGH?—A DOSE WILL RELIEVE IT. HAVE YOU A COLD?—A DOSE AT BEDTIME WILL REMOVE IT.**

*Bronchitis and Asthma it relieves instantly.*

*The Spasms of Coughing so dreadful in Whooping Cough become less with each dose of the medicine.*

*Prepared by* W. T. OWBRIDGE, *Chemist, Hull.*

*Sold in Bottles, 1s. 1½d., 2s. 9d., 4s. 6d., and 11s., by all Chemists and Patent Medicine Vendors. Wholesale all London and Provincial Houses.*

LUNG TONIC

# HAY FEVER AND COLDS CURED BY DR. DUNBAR'S ALKARAM.

**TESTIMONIAL.**

"Capel, Dorking, Surrey, July 3rd, 1877.

"Dear Sir,—I have been suffering from hay fever for 17 years. This season I purchased a bottle of ALKARAM, and have obtained such great relief that I wish to express my faith in so valuable a remedy, knowing that such an important discovery must meet with the success it deserves if once used.—I remain, yours gratefully, "SARAH LEE.

"To Dr. Dunbar."

**Address—Dr. DUNBAR, care of F. NEWBERY & SONS (Estab. 1746), 1, King Edward-street, London, E.C.**

Of all Chemists, 2s. 9d. a Bottle.

# TEETH.

## A COMPLETE SET, ONE GUINEA.

Single Tooth, 2s. 6d.

FIVE YEARS' WARRANTY.

Dr. ANDREW WILSON, late R.N., says:—"I can recommend Mr. Goodman as a very skilful and humane dentist. His reasonable charges should attract to him all classes."

**MR. GOODMAN,** *Surgeon Dentist,*

(Late Manager for Messrs. Eskell,)

**41, LUDGATE HILL** (Opposite Old Bailey).

Hours 10 to 8.

Also at 68a, Market, Manchester; 30a, Bold-street, Liverpool; 57a, Boar-lane, Leeds; 1, Piccadilly, Bradford; 8, Pavilion Buildings, Brighton; 251, Sauchiehall-street, Glasgow, 29, Hanover-street, Edinburgh, &c., &c.

**LIGHT FROM DARKNESS.**
**HEALTH FROM SICKNESS. HOPE FROM DESPAIR.**

# "HERMES."

THE GREAT NERVE SEDATIVE, CURES

**EPILEPSY, ST. VITUS' DANCE, HYSTERIA, NEURALGIA, CONVULSIONS, and all NERVOUS AFFECTIONS.**

HERMES is a pure vegetable product which has for many years been made by private persons, and wonderful cures have been accomplished when all other aid proved ineffectual. Its growing scope has induced the manufacturer to make it public. Of all Chemists. Wholesale: Barclays. Or free by post for 2s. 9d. and 4s. 6d., from the manufacturer, R. PRATT, Chemists, Otley.

# THE ASSOCIATION FOR THE SUPPLY OF PURE VACCINE LYMPH

**12, Pall Mall East, Lond., S.W.**

Sole Agents for

Trade Mark. **Dr. Warlomont's Calf Vaccine.**

Tubes, 2s. each. Half tubes, 1s. each. Pomade in vials, 5s.

HUMAN VACCINE (from healthy children only, microscopically examined and source quoted).—Three tubes, two-thirds full, 5s. Tubes, one-third full, and Lancet Charged Points, 1s. each; Pin-points, 1s. 1d. each. Eighteen Charged Small Points, 5s.

Tubes, two-thirds full (same as those mentioned above, but without source), in quantities for export, £5 per 100 tubes.

**Pin-points uncharged, 1s. per dozen.**

Vaccinations daily between the hours of 12 and 2 by the Consulting Physician, at the uniform fee of a Guinea.

Office hours, 10 to 4; Saturday, 10 to 2.

P.O.O.'s (including postage, and crossed London and Westminster Bank), with orders, payable to EDWARD DARKE, Secretary.

# COD LIVER OIL BECOME A LUXURY.

By far the most agreeable way of taking this valuable restorative is in the form of

## NITHSDALE'S COD LIVER OIL CHOCOLATES

In which the taste of the Oil can scarcely be detected.

*Readily taken by the most delicate Invalids, and greatly relished by Children.*

**HIGHLY RECOMMENDED BY THE MEDICAL PROFESSION.**

Agents { London: LYNCH & CO., 192, Aldersgate-street, E.C.
Edinburgh: DUNCAN FLOCKHART & CO.
Newcastle: PHILLIPS SPENCER, Low Friar-street.

In Boxes, at 1s. and 2s. 6d., from all Chemists and Druggists; or from the Maker—

**D. NITHSDALE, Manufacturing Chemist, PERTH, N.B.**

# ADVERTISEMENTS IN "HEALTH."

TARIFF PER INSERTION.

| | |
|---|---|
| Whole Page | £4 4 0 |
| Half Page | 2 2 0 |
| Quarter Page | 1 1 0 |
| Eighth of Page | 0 10 6 |

Smaller Spaces *pro rata.*

| | |
|---|---|
| Whole Page facing whole Page of matter | 5 5 0 |
| Half Page do. do. do. | 2 12 6 |

**Terms of Subscription per annum.**

| | |
|---|---|
| Including Postage in the United Kingdom, to the Continent, Canada, or the United States | £0 10 10 |
| Including Postage to Australia, New Zealand, South Africa, or the West Indies | 0 13 0 |
| Including Postage to the East Indies and China (via Brindisi) | 0 15 2 |

**OFFICE: 2, PATERNOSTER-SQUARE, LONDON, E.C.**

A COPY POST FREE

**WRITE TO-DAY.**

Write for this valuable little book. Fifty Years' Record of Facts, Principles and Discoveries Relating to the Improvement and Preservation of Human Life on Earth. Origin and True Treatment of different diseases. A series of valuable articles, by Dr. Samuel Birley, M.D., Ph.D. Now Published, complete in book form (40 pages), post free, from the publishers, GORDON MURRAY & Co., Theobalds-road, Holborn. Sound and practical. Write to-day for a copy.

---

**100 YEARS**
**100 YEARS** } AGO
**100 YEARS**

MR. KEARSLEY, of FLEET-STREET, in **1787**, purchased from the **WIDOW WELCH** the recipe of the manufacture of these now justly celebrated Pills.

TWO HUNDRED MILLIONS of these Pills have been taken, conferring benefit upon at least THREE MILLION Women.

---

**KEARSLEY'S**
WIDOW WELCH'S PILLS
are the acknowledged remedy for all female complaints. Contain no irritant drug, and are easy to take.

---

**KEARSLEY'S**
WIDOW WELCH S PILLS
are wrapped in *White Paper*, no others are genuine. Of all Chemists, 2s. 9d. per box; or by post 34 stamps.—SANGER & SONS, 489, Oxford-st., London.

---

**LAIRITZ'S**

PINE WOOL OIL, WADDING,

SOAPS, BATH EXTRACTS, &c.

**Sold by all Hosiers, Drapers, Chemists, &c.**

CHIEF DEPÔT (WHOLESALE)—

*WELCH, MARGETSON & Co., 16, Cheapside, E.C.*

CAUTION.—None genuine except with Trade mark, Pine Tree and Signature.

---

# A WONDERFUL MEDICINE

## BEECHAM'S PILLS.

Are admitted by thousands to be worth a Guinea a Box for Bilious and Nervous Disorders, such as Wind and Pain in the Stomach, Sick Headache, Giddiness, Fullness and Swelling after Meals, Dizziness and Drowsiness, Cold Chills, Flushings of Heat, Loss of Appetite, Shortness of Breath, Costiveness, Scurvy, Blotches on the Skin, Disturbed Sleep, Frightful Dreams, and all Nervous and Trembling Sensations, &c. The first dose will give relief in twenty minutes. This is no fiction, for they have done it in thousands of cases. Every sufferer is earnestly invited to try one box of these Pills and they will be acknowledged to be WORTH A GUINEA A BOX.

For females of all ages these pills are invaluable, as a few doses of them carry off all gross humours, open all obstructions, and bring about all that is required. No female should be without them. There is no medicine to be found to equal BEECHAM'S PILLS for removing any obstruction or irregularity of the system. If taken according to the directions given with each box they will soon restore females of all ages to sound and robust health.

For a weak stomach, impaired digestion, and all disorders of the liver, they act like "MAGIC," and a few doses will be found to work wonders upon the most important organs of the human machine. They strengthen the whole muscular system, restore the long lost complexion, bring back the keen edge of appetite, and arouse into action with the ROSEBUD of health the whole physical energy of the human frame. These are "FACTS" admitted by thousands embracing all classes of society; and one of the best guarantees to the nervous and debilitated is, Beecham's Pills have the largest sale of any patent medicine in the world.

CAUTION.—The public are requested to notice that the words "BEECHAM'S PILLS, St. Helens," are on the Government Stamp affixed to each box of the Pills. If not on, they are a forgery.

Prepared only and sold wholesale and retail by the proprietor, T. BEECHAM, Chemist, St. Helen's, Lancashire, in boxes at 1s. 1½d. and 2s. 9d. each. Sent post free from the proprietor for 15 or 36 stamps.—Sold by all Druggists and Patent Medicine Dealers in the Kingdom.

N.B.—Full directions are given with each box.

---

THE "TIT-BIT" FOR COOKS

**SODDY'S BAKING POWDER**

IT IS ABSOLUTELY THE STRONGEST. THE BEST. THE PUREST.

SAMPLE PACKET WITH A NEW RECIPE FOR A CAKE GRATIS & POST FREE FROM B. SODDY, 243, WALWORTH Rd. LONDON, S.E.

---

## General Nursing Institute,

**5 & 4, HENRIETTA-STREET,**

COVENT GARDEN, LONDON, W.C.

Established 1862. Solely under Medical Direction.

HOSPITAL TRAINED NURSES for every description of disease—MEDICAL, SURGICAL, MENTAL, and MIDWIFERY—can be obtained at this Institute on application to the Secretary or Lady Superintendent at a moment's notice, being resident in the Home.

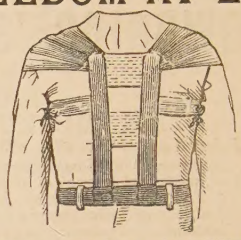
MALE ATTENDANTS and NURSES specially for FEVER cases.

Telegraphic Address, "Nursing Institute, London."

---

## FREEDOM AT LAST

From Corsets



or Suspenders.

THE JUBILEE PATENT

# EPAULET BRACE

Draws the Shoulders *backward* instead of forward, leaving the Sides *free*, and enlarging the Bust. It therefore improves the Digestion, Health, and Figure. It supports also the lower garments by running the belt through latches on the waistband of Trousers, or looping Petticoats to studs on the belt.

*"No Brace can be made more agreeable and effective."*

POST FREE in U. K. by sending P.O.O. to MACKINTOSH & CO., BANK-STREET, SINCLAIRTOWN, KIRKCALDY.

**For Gentlemen, 5/-; Ladies, 4/6; Children, 3/6.**

---

## A CLEAR COMPLEXION.

Pimples, Black Specks, Sunburn, Freckles, and unsightly blotches on the Face Neck, Arms, and Hands, can be instantly removed by using

# MRS. JAMES'S HERBAL OINTMENT.

Made from Herbs only, and warranted harmless.

It imparts such a lovely clearness to the skin that astonishes everyone. Of all Chemists 1s. 1½d. A box (with directions) sent free from observation, post free on receipt of 15 stamps to

**Mrs. James, 268, Caledonian-rd., Lond., N.**

---

# John Heath's PENS

Turned-up Point, Bronzed Fine or Medium, 2s.6d. Golden Coated, 3s.6d. Per Gross

Registered

*Speak for Themselves.*

Or in 6d. and 1/- Boxes. All Stationers. Sample Box (24 kinds) 7 stamps. BIRMINGHAM.

---

SEVENTEEN GOLD, SILVER, & BRONZE MEDALS.

## WM. WOOLLAMS & CO.,

ORIGINAL MAKERS OF GUARANTEED

# NON-ARSENICAL WALL PAPERS.

TO BE OBTAINED OF ALL DECORATORS.

*Manufactory and Sole Address:*

**110, HIGH STREET**
**(Near Manchester-square),**
**LONDON, W.**

NOTE TRADE MARK.

# The Family Circle

"The child is father of the man."—*Wordsworth.*
"In bringing up a child, think of its old age."—*Joubert.*

## HINTS ON THE PHYSICAL REARING OF INFANTS.

By Mrs. Henry King-Parks.

*Author of "In the Morning of Life: Being a Practical Guide to the Management of Children;" "Our Infants: How to Rear Them;" &c.*

SECOND PAPER.

Over-feeding and unsuitable food have killed thousands of infants; and I warn mothers against the common and fatal practice of overloading their stomachs with indigestible food. When a child is at the breast we seldom think of gorging it with solid food, for reason convinces us that the nourishment derived from the breast is sufficient; but when we are obliged to rear the babe by hand we generally commit the singular blunder of making milk an auxiliary instead of the sole aliment. Corn-flour, and other kinds of starch-food, are usually supplied to infants, although the ptyalin of saliva (which acts on starch) is not secreted in infants until they are about seven or eight months old. Hence it is an ignorant, cruel, and reprehensible proceeding to feed them with this class of diet before they have the power of digesting it.

I have but little faith in the milk foods of commerce; yet they are frequently of great service, for innumerable lives have been saved, and illnesses prevented, by their use. When I say that I do not approve of them, I mean only as regards their universal employment; for I am aware that in very many cases infants cannot digest the milk of bovine animals, no matter how carefully and skilfully it may be prepared at home. Thus we are often compelled to seek the aid of the chemist to furnish us with a special preparation suitable for the abnormal requirements of such children. The name of these Foods is legion; but I believe that Carnrick's Soluble Food is one of the best of this description. That manufactured by Savory & Moore is also excellent; and Nestlé's Infants' Food is in good repute. The preference will likely be given to the first named; but previous to using either of them a fair trial should be given to fresh, pure milk, treated in the manner I have described. I cannot here dilate on the composition of artificial foods more than to say that if they are deficient—as, unfortunately, many advertised "foods" are—in flesh-forming and bone-forming materials, and a proper proportion of fat, the child may be crammed and yet die of inanition. In these important elements, Carnrick's Soluble Food is peculiarly abundant. Experience, however, amounts to this: that one child will thrive upon a Food on which another child would starve. The most, therefore, we can do under the circumstances is to select a Food which analysis proves to contain sufficient albuminoid matter and mineral substances for ordinary nourishment, and to subject it to a reasonable test before discarding its use. Malted Foods, and a few others of the pre-digested class, which leave no work for the stomach to perform, should only be administered under the advice of a physician.

As I consider cow's milk, properly prepared, to be the best substitute for human milk, in the majority of cases of the hand-rearing of infants, I cannot omit mention of Dr. Frankland's Artificial Human Milk. The following simple process (taken from the *Glasgow Medical Journal*) will enable any unskilled person to prepare it:—

Allow half a pint of new milk to stand for twelve hours; at the end of this time remove the cream, and add to it one pint of fresh new milk. Into the half pint of skim milk put a piece of rennet about an inch square, to be obtained from the butcher. Set the vessel in warm water till the milk is fully curdled, which requires from five to fifteen minutes, the rennet being removed as soon as the curdling commences, and put into an egg-cup for future use, as it can be employed daily for a month or two. About half a teaspoonful of essence of rennet may be used instead. Break-up the curd thoroughly, and separate the whole of the whey by passing it through thin cloth or muslin; bring the whey rapidly to the boiling point. Add two teaspoonfuls of powdered lump sugar to the boiled whey. The sweetened whey is added to the pint of new milk (and cream). It is then ready for use.

*Sleep.*—When a baby sleeps much and cries little, there is sure evidence of health and good temper. Infants should be allowed to sleep all they are inclined to; and the times of feeding so arranged, when practicable, as not to interfere therewith. Habitual rocking is exceedingly injurious to children. If mothers only knew the danger attending it, this pernicious method of putting baby to sleep would soon be numbered among the customs of the past. Rocking need seldom be resorted to if from the commencement the infant be trained to go to sleep in the nurse's arms, or hushed to sleep, without rocking, in the cradle. The habit of rocking so accustoms the child to this peculiar motion that it soon learns to expect the familiar movement, and cannot be prevailed upon to close its eyes except the cradle be set a-going. I speak from experience when I say that it is quite possible to rear an infant healthily without using a rocking-cradle or a swinging-cot.

But hurtful as this unnatural practice undoubtedly is, the employment of "soothing-syrup," and such-like compositions, is still more unwise and dangerous.* Natural sleep is far more refreshing than that which is artificially procured; and the constant use of sedatives will create a necessity for them that can rarely be corrected afterwards. Indolent and ignorant nurses frequently give, unknown to their parents, sleeping draughts to children; whereas strict attention to diet, exercise, and cleanliness would enable a dutiful nurse to dispense with drugs. When a child suffers from sleeplessness which non-medicinal treatment will not cure, a doctor should be consulted, as he is the only person qualified to prescribe for that ailment. The criminality of home quackery, and the indiscriminate drugging of children, is second only to that of *teaching* them to become adult tipplers, by giving them "teaspoonfuls" of alcohol, in one or other of its various disguises, the almost certain forerunner of the maddening draught later on. If I could induce mothers to banish this poison from their homes, I believe that I would be doing them a service of incalculable benefit to themselves and their offspring.

*Exercise.*—Sleep and exercise are so closely allied that the procuration of the one is largely dependent on the observance of the other; for it stands to reason that if the different parts of the body be not strengthened by exercise, the sluggish circulation of the blood, and other symptoms of ill-health, will more or less affect the character and duration of sleep. Exercise, indeed, is Nature's sleeping-draught, and no better soporific and tonic can be given to the young. Carrying in the arms

* For infantile troubles of simple character, no remedy is safer than Woodward's Gripe Water. The fact that it is prescribed by medical men is alone some testimony in its favour.

is the best form of exercise for infants; but the rough abuse to which they are subjected—such as swinging them about, and elevating them over the head—ought to be stringently forbidden. When a little older, placing them on a soft rug, and permitting them to move and kick at pleasure, will amuse the little ones and strengthen their limbs. Leading a baby by the hands is the proper way of teaching it to walk. Most mothers think that bandy-legs, or some other deformity, will result from allowing infants to stand on their feet; but I fail to see the wisdom of such reasoning, unless in the case of delicate children, inasmuch as although the limbs of children are weak, their bodies are proportionately light; and, had they skill to direct themselves, they would soon be able to support their own weight. "Who ever heard of any other animal that became crooked by using its legs too soon? Every member acquires strength in proportion as it is exercised. Indeed, if a child be not permitted to make any use of its legs till a considerable time after its birth, and be then set upon them with its whole weight at once, there may be some danger; but this proceeds entirely from the child's not being accustomed to use its legs from the beginning."

The longer that children are in the open air, and away from the close atmosphere of towns, the better will it be for their health, as indoor confinement leads to several bad consequences. Pure air and suitable exercise are two cardinal points in the management of infants. The open spaces and public parks should be selected by those who reside in towns, and the early part of the day in preference to the evening.

The perambulator of our youth has given place to the four-wheeled invention. These bassinet-perambulators, as they are called, are light and comfortable carriages, and a great improvement upon the old-fashioned ones; but I fear that their "convenience" is not altogether to baby's advantage, as it is notorious that lazy nurses are enamoured with them because they afford a pretext for wheeling (and chilling) the child instead of carrying it in the arms, and allow time for gossiping on the roads. In their proper place, baby-carriages are very useful machines; but when they supersede hand-carrying of infants and walking by older children, or when they are converted into sleeping chambers (a very common custom—propulsion through the air when asleep, is injurious), I have no hesitation in characterizing them as unhealthy luxuries —mere nuisances. I repeat: whilst infants are light, the best method is to carry them in the arms, as this gives the nurse an opportunity of talking to the child, and of pointing out everything that may please and delight its fancy. After that, wheeling and walking *alternately* will prevent fatigue and strengthen the whole frame.

## CHEST EXPANSION AND CONSUMPTION.

A *résumé* of the views held by Mr. G. W. Hambleton, licentiate of the King's and Queen's College of Physicians, Ireland, on the origin and prevention of consumption was lately given in these pages. These views were presented last year at a meeting of the British Association for the Advancement of Science. Since then Mr. Hambleton has been engaged in certain experiments upon this important subject, and during this research his attention has been drawn to the fact that the size and shape of the human chest vary according as he varied its conditions. So constant was this variation as to make him doubt the present accepted theory of the inheritance of chest-types.

Taking a well-marked example of the so-called inherited consumptive chest, he subjected it to conditions that tend to develop the lungs, till it corresponded in size and shape, first with the town artisan, then with that of a man of the privileged class, and finally with that of a man of the best class of insurable lives in America. By subjecting the same chest to conditions that tend to reduce the breathing capacity, he brought it back through the same types to nearly that with which he commenced; and he claims to have produced similar results in other chests within a period measured by months. At birth the average male child of all classes has the same type of chest, but at maturity he has that of the class to which he belongs. The types of chest, Mr. Hambleton claims, vary with the conditions to which these types are subjected. Thus we have the type of chest of those who use wind-instruments, and another type of those who compress their chests in their work or by a corset. In these no one raised the question of inheritance. This variation of the chest is not peculiar to it: it is true of all other parts of the body. The shape of the head may be altered by direct pressure, and the shape and size of the feet in the same way.

According to this theory of Mr. Hambleton, the type of man after birth is solely produced by the conditions to which he is subject: hence the formation of race by man's continuance under the same conditions, and its subsequent divisions into sub-races and families by his migrations into new conditions and the minor differences therein. The field which is opened up for investigation by these views is, as Mr. Hambleton states, a wide and important one. When we have ascertained what the conditions are that produce these differences in man that together make a class or type, we shall be able to produce that class or type; and we shall also be able to tell what type of body is best suited for a given occupation, and for residence in a given country. "Then we shall train men so that we shall no longer send them into occupations with types of body unfitted for the conditions of that occupation, and consequently we shall be spared the misery and loss of those numerous breakdowns from unsuitability of type that are now daily brought before us.

These views have been referred to a committee of the association, with instructions to investigate them; and in a letter which we have received from Mr. Hambleton, he requests that they be thoroughly tested by scientific men in this country. It will, we are sure, be apparent to our readers, that, if all that is claimed for these opinions is true, a most important and valuable contribution to human knowledge has been made; and, if the practical results which are stated to have been obtained in isolated instances can be made general, the improvement in the human race which is certain to follow will be beyond all computation. We shall be glad to open our columns to those who desire to discuss the question, or have any facts bearing upon it.

Just Published. By Post, One Shilling.

DEFORMITIES AND DISFIGUREMENTS

OF

THE FACE

AND CONNECTED PARTS, WITH CASES AND ILLUSTRATIONS.

By J. FOSTER, M.D.,

*Author of "Dictionary of Domestic Medicine," "Diseases of Females," &c.*

Contents:

Injuries to the Skull—Injuries and Malformations of the Eyes, Eyelids, Eyebrows and surrounding structures—Squint—Injuries to the Nose—Bent Nose—Broken Nose—Disease of the Bones of the Nose—Polypus—Hare-lip—Cleft Palate—Diseased Bone of the Jaw—Ulcers and Tumours of the Lips, Gums, and Tongue—Dental Fistula—Salivary Fistula—Malformations and Disorders of the Ears—Projecting Ears—Eruptions of the Face—Scrofula—Vitrol-throwing—Scars—Distortions from Burns—Cancer—Ulcers—Cysts, Wens and other Tumours—Disorders of the Hair—Loss of Hair—Superfluous Hairs—Premature Greyness, &c., &c. Direct from the Publisher,

C. WALTERS, 50, Buckingham Palace-road, London.

# Healthy Houses

"A happy home must be a healthy home."—*Anon.*

## HOUSE CONSTRUCTION IN RELATION TO HEALTH.

By George H. Blagrove,
*Author of "Shoring and its Application," &c.*

SIXTEENTH AND CONCLUDING PAPER.

HOUSE INSPECTION AND GENERAL REPAIRS.

Doubtless the efficient inspection or testing of drains is one of the most difficult tasks in connection with the examination of premises from a sanitary point of view. In order to render it as easy as possible, it is advisable to keep an accurate plan of the drainage for reference. If we know the exact situations of all our drains, we may be spared the expense of an immense amount of futile excavation. But if we have reason to suspect the existence of an obstruction or other defect in our drains, it by no means follows that it is necessary to uncover every pipe in the whole system.

The first thing to do is to obtain access to the intercepting trap of the main drain, and to open the inspection hole. The plug of any particular closet being drawn up by an assistant, it will be seen whether the proper quantity of water passes through the intercepting trap or not. If not, there is reason to suspect a stoppage or leakage—sometimes both—in the soil-drain communicating with the closet.

When a new system of drains is laid, it is a good plan to have the intercepting trap closed up, and let the whole system of drains and soil-pipes stand filled with water for about five hours, after which, should no leakage appear, the drains may be covered in. Sometimes the "smoke-test" is applied to drains and soil-pipes. It consists in forcing smoke into the pipes with an apparatus constructed upon the principle of a syringe. The smoke will not, of course, pass the water-seal of a trap in sufficient volume to be of any practical service, and it will therefore have to be introduced at several ventilation inlets or inspection holes in succession. Other openings, such as ventilation outlets, should be temporarily closed. The smoke then, by escaping through an open joint or other fissure, betrays the situation of any leak.

More reliable than the smoke test, however, is that made by means of some strong-smelling liquid, such as oil of peppermint. About two ounces of oil of peppermint are poured into a soil-pipe through its ventilation outlet upon the roof, and immediately followed by a few pailfuls of boiling water. The pungent odour of the oil, by escaping, betrays the situation of any leak. It is essential to the efficacy of this test that no closet or other sanitary appliance shall be used during its operation; that the person pouring in the oil shall remain upon the roof until the test is completed, as he would otherwise carry the smell about with him; and that all ventilation openings except the one in use should be closed. A neglect of such precautions as these has often made the "peppermint test," as it is called, deceptive, and therefore inoperative.

The Banner Sanitation Company have recently patented a bottle-shaped grenade, hermetically sealed and filled with oil of peppermint, asafœtida, or a specially prepared compound sold by the Company. These grenades are made either of glass which breaks, or of gelatine which melts, and are intended to be dropped down a soil-pipe for testing purposes. The great advantage obtained by the use of the grenades is that no smell can escape from them until after they have been introduced into the pipes.

We have previously referred to the serious dangers accruing to health from the presence of old brick drains or disused cesspools underground. These ought to be removed; but if this is not done they should be entirely filled with concrete, the object being to prevent them from being receptacles for air. In general repairs or rebuilding, some discrimination should be exercised in permitting old materials to be re-used. Old bricks from drains or cesspools are always more or less saturated with soil, and should never be admitted into any part of a building. Even the old bricks from an inspection chamber have been found to be so impregnated with sewer gas or bad air from drains as to be a source of danger. This has often arisen from the use of open channels instead of pipes inside the chamber, but it may sometimes be due to occasional leakages of air from the intercepting trap, or its junction with the drain. In any case, these old bricks are to be regarded with suspicion. The same objection applies to any stone exposed to similar influences, but in a less degree, stone being less absorbent than bricks.

We should also regard with suspicion any old woodwork from the interior of a house, which may have been exposed to the access of disease-germs; but no fear of any bad results need be entertained from the use of old woodwork which is newly painted.

When roofs are repaired, it is as well to ascertain that lead of the requisite thickness is being used. This is a matter in which we may easily be deceived. We may order 6 lbs. lead, and 5 lbs. lead may be substituted by a dishonest contractor; while on gauging the thickness of the lead we may be unable to detect any discrepancy. This arises from an ingenious mode of cutting the material, by which it is made to appear thicker at the edges than it is in reality. The only reliable test is to have the lead weighed, when we can at once ascertain whether it is 5 lbs. or 6 lbs. in weight per superficial foot. The weight of lead pipes varies according to their strength, or the thickness of the metal. The smaller sized pipes are generally in fifteen-foot lengths; a length of ¾-inch pipe of average strength should weigh about 30 lbs., or of 1-inch pipe, about 50 lbs. A twelve-foot length of 1¼-inch pipe should weigh about 50 lbs.; of 1½-inch pipe, about 72 lbs.; of 1¾-inch pipe, about 84 lbs.; and of 2-inch pipe about 96 lbs. Soil pipes are generally in ten-foot lengths, and if made of lead weighing

Highest Award, Only Gold Medal, London, 1884.

GRANT'S SCOTCH OAT-FLOUR.

Established 1813.

CRAIG MILLS, DUNDEE.

"11, Mount Vernon-road, Liverpool.

"Being very much interested in the 'Food Question,' I buy all new things. Some are born only to die, others live out a useful life, and to this latter class Grant's Scotch Oat-Flour belongs. It is an admirable preparation of oats, giving all the nourishment without the roughness of oatmeal. Porridge, Puddings, Blanc-mange, and Biscuits are excellent made from it. I can, therefore, confidently recommend it to the healthy, because it will keep them in health; to the delicate invalid, because it will restore health; and to children, because it will lay the foundation of a sound and healthy life. To vegetarians it is invaluable. The ease with which it is prepared is by no means to be forgotten.

"Isabella Thwaites."

8 lbs. per superficial foot, a ten-foot length of 4-inch pipe ought to weigh about 84 lbs.

As for old pipes or traps being re-used, those of lead or earthenware can be perfectly cleansed, and if in sound condition, there is no objection to them: but old iron pipes or traps are usually so corroded inside that they are best discarded.

The sanitary inspection of a house should be conducted upon a regular system, notes being taken of everything requiring alteration or repair. For ordinary purposes, a survey is commenced from the roof, and conducted downwards. It matters little for our purpose in which direction we proceed; but probably by going downwards from floor to floor, it will be found easier to trace the course of pipes to the points where they discharge. The roof may be examined, but it requires a storm of rain to test it thoroughly; and in all cases where practicable throughout the premises, careful inspection should be supplemented by reliable tests. It is hoped that the information given in the preceding papers will assist most persons in arriving at a sufficient knowledge of the details of sanitary building to enable them to avoid some of the snares that waylay the unwary house-hunter. The view of the subject which we have placed before our readers is necessarily far from exhaustive. To those who would pursue it further, we recommend the advantages of personal observation and experiment as the surest guides to results within reach of all who study intelligently the laws of health.

## VENTILATION OF SCHOOLS.

Mr. C. F. Bearsley, M.A., says in the *Sanitary Record* that in the case of a school in which the ventilating apparatus is unsatisfactory, two or three considerations, suggested by experience, should be kept in mind.

In the first place, it is easier to keep the air of a room pure than to restore its purity after it has become foul. Some teachers, I have noticed, think nothing about the ventilation of their rooms till they have been occupied for an hour or two. Then, their attention being at last arrested by the increasing stuffiness of the atmosphere, when the walls are damp and the air is offensive, they suddenly throw open all the windows, with what result it is easy to foresee.

Secondly, we must remember that some children are more sensitive to cold or draught than others, and that all the pupils, from the circumstance that they remain sitting still, will both feel cold and take cold much more readily than the teacher, who is standing or moving actively about. This is a point that is often, I think, overlooked.

Thirdly, the practice of throwing open all the windows, and, where convenient, the doors of the schoolroom during play intervals, although pretty general, is by no means always observed. Its utility is obvious.

Lastly, in cold weather a schoolroom may sometimes be ventilated indirectly. For example, in my own school, during last winter, I contrived to keep one of the large rooms well supplied with pure air from a small room adjoining it. This small room being in use during a part of the day only, the window in it was at other times kept open. The door between the two rooms also was either kept more or less open, or opened at suitable intervals while the work was going on. The result was that the air in the large room was kept agreeably fresh. The smaller room served as a kind of fresh air reservoir, and the fire which was kept burning in it did something towards warming the outer air in its passage to the larger room. This, I dare say, was not scientific ventilation, but it was effective, as was observed by visitors to the school. Wherever a spare room, or even a lobby, is available, the experiment could easily be repeated.

I am aware that the attempt to ventilate schoolrooms by opening the windows or doors has often been denounced as both dangerous and futile. Without care it may certainly do great mischief; but with care and watchfulness it need be attended with no serious danger. "Some simple method," says another school inspector, "of introducing fresh air without causing draughts would add materially to comfort and wholesomeness." The man who can devise such a method will deserve to be regarded as a benefactor to humanity. Pending his advent, reliance will have to be placed, to a great extent, on a judicious opening of doors and windows.

A Second Thought.—A well-known New York homœopathic physician says that he was once rung up in the middle of the night and requested by a man to call immediately upon his wife. "Very well," said the doctor. "How much will it cost?" asked the caller. "Ten dollars—to go that distance." "How much will it be if you call in the morning?" "Two dollars." "Well, call in the morning," said the husband.

A City of Mosaics in Clay.—The streets of Puebla are wider and better than those of Mexican cities, and the buildings are finer, having all of them two or more stories; in pleasant contrast to the usual narrow stony alleys, overshadowed by Moorish cases centuries old, bearing the gloomy air of an iron age. Beside the inevitable central plaza and alameda, Puebla rejoices in no no less than twenty-six public parks—all flowery breathing-places where the populace congregate every evening of the week. The shop-fronts and most of the houses are built of six-sided bricks, with small blue tiles set in between. Others are a perfect mosaic of Dutch or China tiles, upon a groundwork of Pompeiian red, arranged in all manner of designs, and having numerous plaques and panels, upon which saints are carved or painted, let into the walls. The effect is charmingly quaint—somewhat startling to northern eyes, but one soon becomes accustomed to the vivid colouring, and learns to regard our common-place abodes much as a collector of ceramics looks upon delf as compared to decorated pottery.

*The only Oat-Flour that was awarded Honours at the Sanitary Institute of Great Britain Exhibition, Glasgow, 1883; International Health Exhibition, London, 1884; and New Orleans Exhibition, June, 1885 (Gold Medal).*

SCOTT'S
MIDLOTHIAN
"Unequalled." OAT-FLOUR.

SOLE MAKERS,
A. & R. SCOTT, Kingston, Glasgow; and
15A, Finsbury-square, London.

Export Agents—BOYACK & CO., 88, Bishopsgate-Street, E.C.

Scott's Midlothian Oat-Flour.—There is no preparation which can be assimilated with greater facility than such a flour as this. Those who suffer from indigestion might substitute for their ordinary breakfast materials this flour, prepared according to the recipe given by Messrs. Scott and printed on the tins.—Ed. Health.

RICH IN PHOSPHATES & NITROGEN.

NOT FARINACEOUS.

# MELLIN'S FOOD for INFANTS and INVALIDS.

Extract from the report of Dr. A. STUTZER, of Bonn, on "Mellin's Food":—

"Starch is entirely absent, and the carbohydrates present must consequently be easily assimilable. These carbohydrates consist of *maltose-sugar*, *dextrine*, and *milk-sugar*, so well adapted for the nourishment of the infant's organism, whilst cane-sugar, which has an unfavourable action upon children because it produces an excess of acids in the stomach, is entirely absent.

"**As the result of my analysis and experiments, I must hold that MELLIN'S FOOD, when properly prepared for use, is very excellent, and fulfils all the requirements of a Food for Infants.**

"Bonn, Jan. 23, 1887."

*Pamphlet, with full Report and Analysis, free on application.*

PRICE 1/6 & 2/6 PER BOTTLE.

TRADE MARK.

ORA ET LABORA

MELLIN'S

LACTO-GLYCOSE

OR

MILK FOOD.

**Price 2s. and 3s. per Bottle.**

In this preparation Milk is incorporated with the Food in the process of manufacture, thus making it specially suitable where a difficulty exists in procuring fresh cows' milk, as, for instance, on board ship and in hot climates.

Sample and Prospectus on application to the Inventor and Manufacturer,

**G. MELLIN, Marlboro' Works, Peckham, S.E.**



NOW READY. VOLUME IX. OF

# HEALTH

**Handsomely bound in cloth, price 7s. 6d.**

Among hundreds of other interesting subjects treated in this Volume, Articles have appeared on the following:

| | | |
|---|---|---|
| POISONOUS AIR AND WHAT COMES OF IT. | HOUSE CONSTRUCTION IN RELATION TO HEALTH. | NURSING. |
| BRAIN FORCING IN CHILDHOOD. | MASSAGE. | SCARLET FEVER. |
| HATS AS A CAUSE OF BALDNESS. | MILK. | SHALL I SMOKE? |
| HOLIDAYS AND HOLIDAY RESORTS. | VACCINATION. | VEGETARIANISM. |

Cloth Cases for binding Vol. IX. can be had, price 2s. Index for ditto, price 2d.

ALEXANDER P. WATT, 2, PATERNOSTER-SQUARE, LONDON, E.C.



COUGHS, COLDS, ASTHMA, BRONCHITIS and NEURALGIA.

## Dr. J. Collis Browne's CHLORODYNE.

A few doses quite effectual. — Caution. — The extraordinary medical reports on the efficacy of Chlorodyne render it of vital importance that the public should obtain the genuine, which is protected by a Government stamp, bearing the words "Dr. J. Collis Browne's Chlorodyne." See decision of Vice-Chancellor Sir W. Page Wood, the *Times*, July 16th, 1864.

Numerous testimonials from eminent Physicians accompany each bottle. Sold in Bottles, 1s. 1½d., 2s. 9d., & 4s. 6d., by all Chemists.



*New Work by A. M. BROWN, M.D.*

Now Ready, price 6s.

## A TREATISE ON THE ANIMAL ALKALOIDS;

OR THE

## PTOMAINES AND LEUCOMAINES

Chemically, Physiologically, and Pathologically Considered in Relation to

## Scientific Medicine.

WITH AN INTRODUCTION BY ARMAND GAUTIER.

BAILLIÈRE, TINDALL, & COX, 20, KING WILLIAM-STREET, STRAND, LONDON, W.C.

## BAYLEY'S REMEDIES.

HÆMORRHOIDS (or PILES).

As highly useful family medicines for that most distressing complaints, hæmorrhoids (or piles), Bayley's Remedies have long enjoyed a high reputation. These remedies consist of specially prepared Pyrmont tablets for invalid use, and of a Pyrmont liniment for outward application. The tablets are compounded on the principle of the famous Pyrmont waters, which have been so highly recommended in cases of liver complaints, to the presence of which piles are often due, as well as in cases of the latter ailment itself. The liniment is made on allied principles. From an examination of these tablets and of the liniment, we are able to assert that they contain nothing calculated to produce untoward effects in the most delicate constitution, while they are likely to prove most beneficial in mild and in severe cases alike. The ease with which the remedy may be taken—the tablets being agreeable to taste, and being merely allowed to dissolve in the mouth—will recommend this preparation in the eyes of those especially who have run the gamut of the many drugs employed for the cure of hæmorrhoids. We recommend a trial of Messrs. Bayley's Tablets, &c., which are to be obtained at 17, Cockspur-street, London, W.

*Vide* "HEALTH," *April 8th*, 1887

BAYLEY'S REMEDIES.

# EAU LODOÏS,

THE ONLY TRUE HAIR PROMOTER.

PERFECTLY HARMLESS.

FOR PARTICULARS APPLY TO THE

FRENCH HYGIENIC SOCIETY,

*56, CONDUIT STREET, LONDON, W.*

## MÖLLER'S COD LIVER OIL.

IS NOT AN EMULSION, AND DOES NOT, CONSEQUENTLY, CONTAIN THE 50 PER CENT., OR MORE OF WATER USUALLY CHARGED FOR AT THE PRICE OF OIL

PERFECTED IN ONE OPERATION! NO AFTER-MANIPULATIONS!

*Fcap. 8vo, with Illustrations.* 1s. 6d. *each.*

## AMBULANCE LECTURES.

BY SAM. OSBORN, F.R.C.S.

1.—FIRST AID TO THE INJURED.

2.—HOME NURSING AND HYGIENE.

LONDON: H. K. LEWIS, 136, GOWER-STREET W.C.

RUTH'S

# WINE *Established 1791.* VINEGAR

IS SUPERIOR TO ALL MALT VINEGARS.

The Vinegar used by the chief cuisiniers throughout the world for the Table, Salads, Sauces, Pickles, and all condiments. See that you get Ruth's. Obtainable of all superior tradesmen in cask or bottle. RUTH & Co., Maze-hill, London, S.E.

## HARROGATE.

*THE IMPERIAL HYDROPATHIC AND WINTER RESIDENCE.*

A HYGIENIC HOME FOR INVALIDS AND VISITORS, AND FOR THE TREATMENT OF CHRONIC COMPLAINTS BY ELECTRICITY.

Winter Terms. Prospectus Free.

Crown 8vo, pp. 150, illustrated, price 3s.

ELECTRICITY IN DISEASE. HOW TO USE IT, AND WHAT IT WILL ACCOMPLISH. By J. R. TUNMER, Resident Medical Superintendent.

London: ALLEN, 5, Ave Maria-lane, E.C.; or of the Author, as above.

## ONE BOX OF CLARKE'S B41 PILLS

IS WARRANTED TO CURE

All ailments of the Urinary Organs (acquired or constitutional), Gravel, and Pains in the Back.

GUARANTEED FREE FROM MERCURY.

Sold in Boxes, 4s. 6d. each, by all Chemists and Patent Medicine Vendors throughout the World; or sent to any address for sixty stamps by the Makers,

**THE LINCOLN AND MIDLAND COUNTIES DRUG COMPANY, LINCOLN.**

Wholesale Agents: BARCLAY & SONS, London, and all the Wholesale Houses.

THE POOR MAN'S FRIEND.
DR. ROBERTS'S OINTMENT.

THIS VALUABLE OINTMENT (as originally prepared by G. L. ROBERTS, M.D), is confidently recommended to the public as an unfailing remedy for Wounds of every description, Chilblains, Scorbutic Eruptions, Burns, Sore and Inflamed Eyes, Cancer, Piles, &c.

IN USE 100 YEARS.

DR. ROBERTS'S ALTERATIVE PILLS are one of the best medicines for Purifying the Blood; are useful in Scrophula, Scorbutic Complaints, Glandular Swellings (particularly those of the neck), and are very effectual in the cure of that form of skin disease which shows itself in painful cracks in the skin of the hands. They may be taken at all times without confinement or change of diet. Sold at 1s. 1½d., 2s. 9d., 4s. 9d., 11s., and 22s. each, by the Proprietors, Bridport, and by all Chemists.

## THOMSON'S COD LIVER OIL CREAM

DELICIOUS,

EASILY DIGESTED, AND HIGHLY NUTRITIOUS.

From HEALTH, 30th Nov., 1883.—"For children and invalids generally this preparation must be highly commended."

Bottles, 2s. 3d., 4s., and 7s. 6d.; by post, 3d. extra.

Prepared only by R. THOMSON, Chemist, 40, DUBLIN-STREET, EDINBURGH, (late with SQUIRE, Chemist to the Queen).

London Agents—J. SANGER & SONS, 489, Oxford-st.

# Popular Science Papers

"Blessings on Science! When the Earth seemed old,
When Faith grew doting, and our reason cold,
'Twas she discovered that the world was young,
And taught a language to its lisping tongue."

—*Charles Mackay.*

## PAPERS ON ALCOHOL.

FOURTH PAPER.

## SEDENTARY MEN AND STIMULANTS.

By Dr. W. S. Searle.

To the employment of tea and coffee little opposition is made at the present day. But time was when even these were objurgated severely. To tobacco and wine, however, there still exists the most violent objection, which, as a rule, proceeds from the very men who most need them.

To reply fully to such partisans would consume more space than is now at command. But of the devout, who believe in the guidance of the race toward ever better and higher conditions, and even in personal control by a beneficent Providence, we may properly ask why mankind has been led to the discovery and universal employment of such substances. Why, indeed, were tea, coffee, and tobacco ever created—plants which possess almost no other than a paratriptic value?

Of the optimist we may inquire how it happens that no barbarous nation was ever found without some similar substitute for food? How shall we explain the marvellous avidity with which the race has seized upon plants of this kind? And, if their consumption is so extensive, as we know it to be, and so prejudicial as some would have us believe, how is it that, since their introduction, the average duration of life has so greatly increased?

A very brief statement of well-known historical facts will be appropriate here.

It is about two hundred years since tea and coffee were brought into Europe, and now millions of tons of them are annually consumed.

Columbus discovered tobacco with America. Not till a century later was it much used. But since that date the rapidity and universality of its spread has been unequalled by any other substance. For every soul existing upon the entire planet, five pounds are now yearly demanded. This is far beyond what can be said of rice or maize, or any other vegetable product ever presented to the palate of man.

Wines, too, or equivalent stimulants, have been universally adopted.

Surely there must be some sound physiological reason for such wonderful phenomena—for a craving common to the whole race. The rigours of climate have taught man everywhere to build houses and to wear clothes. His reason and taste have led him to cook and season his food. His habits in these regards have a self-evident origin. But no such explanation is competent to the above facts.

It will not serve to claim that man has chosen these things because they afford him pleasure or enjoyment. Doubtless some of them do; but tea and coffee can hardly be reckoned as sensual delights, and certainly, to the novice, tobacco is nauseous in a high degree. Still further, the pleasurable effects of haschisch and of opium have long been known to the world, and still men do not, and will not, use them as they use tobacco.

The fact is that these paratriptics meet some want in human life. And no better or more rational solution of the problem can be given than this, viz., that the demand for them is based upon their power to prevent waste in the body, so that, by their help, men can work longer and endure more privation with a smaller amount of food.

Who shall measure these benefits, or adequately depict them? Silently and unseen these tremendous influences are at work, and their effects, in the aggregate, must be astounding. It would be a small estimate of their powers to claim that they reduce the otherwise necessary food supply by one-tenth, and this in a world where even now famine and starvation are not unknown.

Wherever men are obliged to endure hardship and privation their aid is indispensable. The soldier, the sailor, the explorer, the sedentary man, the labourer, all fly to them for help. Moleschott calls them the "savings bank" of the tissues, and the common voice of physiologists unites with the almost universal testimony of mankind in pronouncing them a blessing to humanity.

It is now time to remark that it is the properly limited employment of paratriptics to which we refer. They are not food, although, temporarily and continuously, they supplement it. And excess in the use of any of them probably never fails to result in injury more or less extensive and lasting. But this is true of excess in any good thing. And it must be noted that excess is a purely relative term. Moderation for one is excess for another, and *vice versâ*. Excess, too, in some of them is a far greater evil than excess in others.

Of those in common use, without doubt, the various forms of alcohol are capable of inflicting the greatest amount of injury. Separated by a long distance, follow, in their order, tea, tobacco, and coffee.

Much has been said of the dreadful results of the use of coca by etiological idiots, who attribute all the ailments of the debased Peruvian Indians to its consumption. They rival in wisdom those who lay all the physical woes of modern life at the door of vaccination. Some instances have been adduced in the public prints of insanity and death following over indulgence in its main derivative—cocaine. But these have never yet been properly linked as cause and effect.

Lack of space forbids more than a brief analysis of the effects of the paratriptics named. We cannot now give them more attention singly than will be germane to our subject.

All the world knows but too well the terrible results of the abuse of alcohol. But these should not blind our eyes to the beneficial effects of its proper employment. The latter are immeasurable and unseen even except by physicians, and, in the estimate, it should have no light weight that, while none know better than they the fearful consequences of excess, the most intelligent and conscientious physicians still universally prescribe alcoholic beverages.

They often find it impossible to save or to prolong life without them. In 1867 Sir Francis Skey stated that during the preceding forty years, the consumption of stimulants in the London hospitals had increased fourfold.

Some physiologists claim that they are true foods, since it is an undisputed fact that they are, in some way, at least partially consumed in the body. But, we do not need a scientist to proclaim their paratriptic power, for common observation shows how little the drunkard eats.

During a famine in Germany, Baron Liebig states that in temperance families, where beer was rejected, and the

money it would have cost given in its place, it was soon found that the monthly consumption of bread was so strikingly increased that the beer was twice paid for—once in money, and a second time in bread. With this conclusion also agree many other experiments.

It is a serious mistake to claim that all forms of dilute alcohol are, and can be, nothing but poison, because when concentrated or in large quantities it has been proven to be such. Salt is a valuable ingredient of food, but strong solutions of it are poisonous.

Nor can we allow what reformers so vigorously claim, that moderation in stimulants necessarily leads to excess. Careful observation will convince any candid mind that of those who have long partaken moderately of wines, &c., but a very small minority ever become drunkards.

There appear to be two quite different temperaments regarding the effects of stimulants. One is pleasantly affected by them. The more he consumes the more happy he feels, the more vivid become his emotions, the more brilliant his conceptions, and drunkenness is the supreme point of enjoyment. Fortunately this is true of but a very small number. Upon the great majority of men stimulants have a stupefying effect, and even an approach to drunkenness is accompanied by such nausea, vertigo, and general discomfort, that one such experience forbids repetition. Of these two classes of men the former become drunkards with great uniformity. Moderation, to them, in stimulants, and usually in any delightsome thing, is an impossibility. But the majority form a class out of which drunkards are never made, unless it be by remorse or trouble.

To suppose, then, that there is any necessary connection between moderation and excess in alcohol, is not only to fly in the face of evidence, but to ignore physiology. Multitudes of men daily consume a certain amount of tea, coffee, tobacco, or wine with unvarying regularity for a lifetime, and never increase the amount. It must be remembered that the tissue of to-day is not the tissue of to-morrow. The particles acted upon to-day will not be living when fresh influences are applied to-morrow.

Whether the evil results of a use of alcoholic beverages as a whole outweigh the beneficial effects derived from their moderate use must ever remain an open question. There can be no doubt, however, that the former are palpable and cognizable, as well as enormous, while the latter are obscure and hidden; that the former are often exaggerated, and the latter entirely overlooked.

But, in any event, it cannot be truthfully denied that the various derivatives from the grape have a paratriptic influence of no small extent and value to mankind.

---

Home-Made Ice.—Take a cylindrical earthen vessel and pour three and a third ounces of commercial sulphuric acid and one and three quarter ounces of water into it and then add one ounce of powdered sulphate of soda. In the centre of this mixture place a smaller vessel containing the water to be frozen; then cover the vessel, and, if possible, revolve the whole with a gentle motion. In a few minutes the water in the small vessel will be converted into ice. The same mixture can be used a second or third time for making a block of ice. The operation should, if possible, be performed in a cool place, in a cellar, for example.—*La Science en Famille.*

## ECONOMY OF FOOD.

In a paper on "Economy of Food," Professor L. O. Atwater lays down the principle that "the cheapest food is that which furnishes the actually nutritive materials at least cost." The nutriments of vegetable food are, he said, in general much less costly than the animal foods. The animal foods have, however, the advantages of containing larger proportions of protein and of fats, and the protein at least in more digestible forms. Flour, meal, and other staple vegetable foods furnish the nutriments at only a fraction of their cost in ordinary animal foods.

At market prices, current in the Eastern States, the cost of the protein ranges at from eight to thirty-four cents a pound in the staple vegetable foods, and from eighteen cents to somewhat over one dollar a pound in the staple animal foods. In oysters it ranges at from two to three dollars a pound, in salmon sometimes to five dollars a pound, in beef at from ten to twenty-five cents a pound from about forty cents to one dollar and ten cents. In many of the usual food-fishes the nutritive material is dearer than in beef. The less expensive kinds of meat contain as much nutriment as the costlier kind, and the different grades of flour have a much more nearly equal nutritive value than is commonly supposed.

Among the vegetable foods, wheat-flour, corn-meal, and other cereal products are in general the cheapest and most economical, Wheat-flour at six dollars a barrel and potatoes at forty cents a bushel would furnish nutritive material at about the same cost. The prices of the choicer food-materials are regulated by flavour as well as by the amount of nutritive material, which in some is hardly a fraction of the price. With exceptions that are easily explained, the prices of foods that are bought and used for their nutriment tend to shape themselves proportionately according to the actual values.

Taking the world through, the mass of people select those foods which furnish the actual nutrients at the lowest cost; but there are marked exceptions in the United States, where many, even among those who desire to economize, use needlessly expensive kinds of food. They too often endeavour to make their diet attractive by paying high prices in the market rather than by skilful cooking and tasteful serving at home. Wastefulness of food shows itself in the purchasing of more than is needed, in using part of the excess to overload the alimentary organs and throwing the rest away, in purchasing food that seems cheap but is really dear, in using costly materials where less expensive ones would serve as well, and in the false economy of using too little of one material and too much of another.

Great evils accrue from these practices, in the loss of money and the deterioration of health; and some of the wisest students of physiology and hygiene are persuaded that improper eating, and especially overeating, is a source of more disease than any other one thing.

---

A Cautious Preacher.—During the prevalence of scarlet fever in Plainwell, Michigan (says *Sunday Words*), all the churches are closed. The Baptist pastor sends his sermon weekly in a printed sheet to all the members of his flock.

Families desirous of obtaining genuine Wines, Brandies, or very old Whisky on the best possible terms should write for prices current to Pownceby & Co., 183, Oxford-street, London, who, being direct importers, save their customers at least fifteen per cent., while individual attention is given to every order, and goods selected to meet particular requirements.—[Advt.]

## WORSE THAN SMALL POX.

### A Great Danger which Menaces an Unsuspicious Public.

The Brompton Hospital for Consumptives, in London, reports that over fifty people out of every hundred consumptives are victims of constipated or inactive kidneys.

Consumption is one of our national diseases, and the above report goes to prove what has often been said in our columns during the last few years, that kidney troubles are not only the cause of more than half the cases of consumption, but of ninety out of every hundred other common diseases. They who have taken this position made their claims after elaborate investigation, and their proof that they have discovered a specific for the terrible and stealthy kidney diseases, which have become so prevalent among us, is wise and convincing.

We have recently received from them a fresh supply of their wonderful advertising. They have challenged the medical profession and science to investigate. They have investigated, and those who are frank have admitted the truth of their statements. They claim that ninety per cent. of diseases come originaly from inactive kidneys; that these inactive kidneys allow the blood to become filled with uric acid poison; that this uric acid poison in the blood carries disease through every organ.

There is enough uric acid developed in the system within twenty-four hours to kill half-a-dozen men.

This being a scientific fact, it requires only ordinary wisdom to see the effect inactive kidneys must have upon the system.

If this poison is not removed, it ruins every organ. If the bowels, stomach, or liver become inactive, we know it at once, but other organs help them out. If the kidneys become constipated and dormant, the warning comes later on, and often when it is too late, because the effects are remote from the kidneys, and those organs are not suspected to be out of order.

Organs that are weak and diseased are unable to resist the attacks of this poison, and the disease often takes the form of and is treated as a local affliction, when in reality the real cause of the trouble was inactive kidneys.

Too many medical men of the present day hold what was a fact twenty years ago, that kidney disease is incurable, according to the medicines authorised by their code. Hence they ignore the original cause of disease itself, and give their attention to useless treating of local effects.

They dose the patient with quinine, morphine, or with salts and other physics, hoping that thus nature may cure the disease; while the kidneys continue to waste away with inflammation, ulceration, and decay, and the victim eventually perishes.

The same quantity of blood that passes through the heart passes through the kidneys. If the kidneys are diseased the blood soaks up this disease, and takes it all through the system. Hence it is that the claim is made that Warner's Safe Cure, the only known specific for kidney diseases, cures 90 per cent. of human ailments, because it, and it alone, is able to maintain the natural activity of the kidneys, and to neutralise and remove the uric acid, or kidney poison, as fast as it is formed.

If this acid is not removed, there is inactivity of the kidneys, and there will be produced in the system paralysis, apoplexy, dyspepsia, consumption, heart disease, headaches, rheumatism, pneumonia, and all the nameless diseases of delicate women. If the poisonous matter is separated from the blood, as fast as it is formed, these diseases, in a majority of cases, would not exist.

It only requires a particle of small-pox virus to produce that vile disease, and the poisonous matter from the kidneys passing all through the system and becoming lodged at different weak points, is equally destructive, although more disguised.

If it were possible for us to see into the kidneys, and how quickly the blood passing through them goes to the heart and lungs and other parts of the system, carrying this deadly virus with it, all would believe without hesitation what has so often been stated in advertisements in these columns, that the kidneys are the most important organs in the body.

They may regard this article as an advertisement and refuse to believe it, but that is a matter over which we have no control. Careful investigation and science itself are proving beyond a doubt that this organ is, in fact, more important than any other in the system as a health regulator, and as such should be closely watched for the least sign of disordered action.—*The Family Doctor*, September 3.

---

M. Vigier's new cosmetic consists of boracic acid, one part, dissolved in rose water, one hundred parts, and English honey water, five parts. This solution may, he says, be applied morning and evening as a remedy for acne or pimples.

# Our Letter-Box

"Conference [maketh] a ready man."—*Bacon.*

### *NOTICES TO CORRESPONDENTS.*

*All Communications for the Editorial Department (including Books for Review, Specimens of Sanitary Appliances, &c.), to be addressed to* "The Editor of Health," 2, PATERNOSTER-SQUARE, LONDON, E.C. *Those intended for the Publishing Office to be sent to* Mr. A. P. Watt, The Publisher, *at the same address.*

### RULES FOR CORRESPONDENTS.

Owing to the mass of letters which reaches us each week, we respectfully direct the attention of Correspondents, desiring replies in the Letter-Box Department of Health, to the following rules:—

1. All questions are answered free of charge in the columns of Health.
2. All letters must be legibly addressed to "The Editor of Health, 2, Paternoster-square, London, E.C.," *and to no other address.*
3. Questions to which answers are desired by post, are so replied to solely at the Editor's discretion. If no answer is sent by post, the query will be replied to in the "Letter-Box" columns of Health. A stamped addressed envelope must accompany all queries to which a private reply is desired.
4. Addresses of physicians and surgeons will, as heretofore, be forwarded free to Correspondents on their enclosing a stamped addressed envelope for reply.
5. Correspondents are requested to write on one side of the paper only, and to make their inquiries as brief as may be consistent with clearness.
6. From the necessity of sending Health to press early in the week, no Correspondent can be replied to in the "Letter-Box" columns in the same week in which the inquiry is received. Replies crushed out of any issue will be found in the succeeding number.
7. No Post Cards must be used in sending queries. Violation of this rule deprives the sender of the privilege of a reply.

## LETTERS TO THE EDITOR.

### CEREAL FOOD FOR THE COLD AND HUNGRY.

Sir,—As every practical hint on food thrift is of essential value just now, will you kindly permit me to say a word or two in favour of good whole meal bread from freshly ground wheat? This will provide both nourishing and appetising food for the poor under 2d. per day, amply sufficient to protect against the winter's cold, and also to sustain for the hardest labour—just as surely as the strength and warmth of the horse are got from oats. It is in fact the "heartiest" food that science can suggest, and only needs to be made up in appetising form to give almost universal satisfaction. This brown bread gives an indirect bounty also to the British farmer without protective duties, as good English wheat is needful to make the most toothsome quality. One difficulty to be overcome that must be kept in view is that the ordinary mill-stones will not grind up the bran; therefore the trade prejudices of millers and bakers can only be overcome gradually. With steel mills and good English wheat the bread can be supplied at a profit

---

The Third Edition *of this most important work is* now ready.

A Lecture to Young Men on "Purity of Life and the Preservation of Health," by A Graduate. Price One Shilling, or post-free 1s. 1d., from Henry Renshaw, Medical Publisher, 356, Strand, London, W.C. A complete refutation of quackery, and a safe and reliable guide, from the medical standpoint, to all young men. Every youth should read this pamphlet as a guide to the safe conduct of life in a moral and physical sense.

of 1d. per lb.—as some of the Union contracts are undertaken at 3½d. per 4lb. loaf, after the wheat has been deprived of its "offal"—or what science declares to be its richest properties for providing both bone and muscle. I beg to enclose samples of such bread made from whole meal and water, and nothing else, and shall be glad to supply samples and recipes to all Managers or Secretaries of Homes or other Philanthropic Institutions who will send stamped and addressed wrappers. The more our food is chewed the more completely is it digested and used up, as Mr. Gladstone has publicly testified. Hence cereals baked and raw fruit are far better fare than soups or other spoon food. The most perfect assimilation is obtainable only through the teeth and saliva being freely employed. Kindly allow me, Sir, to protest, in conclusion, that ours is not a Vegetable-arian Society—our title being derived from "vegetus," signifying all that is vigorous, healthful, and vital.—Yours truly,

*Vegetarian Society's Depôt,* W. S. Manning.
62, *Ludgate Hill, E.C.*
*Oct.* 15, 1887.

[The samples sent are certainly both palatable and nutritious.—Ed. H.]

## PLUMBING LEAKAGES.

Sir,—On page 45 of Health I observe it stated that Mr. Wm. P. Gebhard considers the peppermint test the best one for old buildings. Now, I do not agree with that opinion, but consider the machine-applied *smoke-test* the better one, as in it you have both the senses of smell and sight, whereas the peppermint only indicates by smell, and some people are dull in that sense. With the smell-test alone it is often difficult to localize a leak, so that needless expense may sometimes be incurred. This caused the Sanitary Protection Associations, which had been using the peppermint or paraffin tests since their origination, in 1878, to give these up lately and take to the machine-applied smoke test, which I have been successfully using for the last ten years or so, and which within the last five or six years has become so universally applied in this country.—I am, &c.,

21, *Renfrew-street, Glasgow.* W. P. Buchan.
*Oct.* 22, 1887.

## QUERIES AND ANSWERS.

### REPLIES: GENERAL, SANITARY, AND MEDICAL.

March.—Try Mellin's "Stone Solvent," Marlborough Works, Peckham, S.E. This remedy has proved of great value in cases such as that you describe.

B. B.—We should prefer Marshalls' "Tritola." Give this daily in the form of milk-puddings to the children. It is a pleasant and nourishing food.

J. Gibson.—In your case, a change of air, and the use of a Turkish bath at frequent intervals, would do you much good. Why not try one of the Hydropathics near your residence, and undergo a system of baths at such a resort?

E. Malcolm.—Drugs in your case are likely to prove useless, whereas change of air and treatment such as that described may benefit you, and enable you to face the cold season without fear. You might try the effect of the following, taken for a week at a time with intervals of two or three weeks: Iodide of potash, two drachms; infusion of calumba, six ounces. Mix. Label: "A dessertspoonful twice daily between meals."

G. P. L.—Wash regularly with Iodoform Soap and tepid water. Take a little Lamplough's Pyretic Saline each alternate morning, for a time, on rising; let your food be very light; rest after your meals; avoid overwork and chills; and take fifteen drops Fer Bravais, in water, after your meals, thrice daily.

Ignotus.—The causes are very numerous. It is impossible to fix on a cause without knowing the exact history of the patient. Anything tending to alter the natural action of the organs will produce the effect you describe. You are susceptible of being cured, but the only satisfactory mode of treatment is to be carried out by a physician. Send for address of such.

Prentice Hand.—Clothe warmly (see advice to "A. Meikle" in the present number), and try the following mixture: Chloride of ammonium, two drachms; spirits of chloroform, one drachm; simple syrup, three drachms; water, to make up six ounces. A tablespoonful to be taken in water every four hours.

"ELECTRICITY IS LIFE."
(TRADE MARK.)

PULVERMACHER'S
WORLD-FAMED
GALVANIC BELTS,

FOR the CURE of NERVOUS DISEASES.
HAVE RECEIVED TESTIMONIALS from
THREE PHYSICIANS to
HER MAJESTY the QUEEN,
THE ACADÉMIE DE MÉDECINE of Paris and
FORTY MEMBERS of the
ROYAL COLLEGE of PHYSICIANS of LONDON.

RECENT TESTIMONIALS.

GALVANISM *v.* LUMBAGO and NERVOUS EXHAUSTION.
Herne Bay, Kent, 19th October, 1887.
Dear Sir,—I wore one of your Galvanic Belts for a period of about three months, and have great pleasure in stating that I have derived immense benefit from its use. It has quite cured me of Lumbago, and it is better than all the tonics in the world.—Yours faithfully,
G. Turner Jones, Bengal Infantry.
Mr. J. L. Pulvermacher, 194, Regent-street, W.

GALVANISM *v.* PAIN in the SHOULDER.
Southsea, Hants, 10th October, 1887.
Dear Sir,—I have found your Galvanic Belt extremely useful in a case of severe pains due to accidental injury to the shoulder.—Yours truly,
F. J. Driver, M.D.
Mr. J. L. Pulvermacher, 194, Regent-street, W.

GALVANISM *v.* SEVERE NEURALGIA.
Peckham-rye, London, S.E., 8th October, 1887.
Dear Sirs,—Some years ago I suffered much from severe neuralgia in the shoulders, for which I was advised to try one of your Galvanic Bands. I had been treated by one of the most celebrated physicians in London, without deriving any relief, but after using your appliance I soon found great benefit, and eventually got rid of this painful ailment. I can therefore recommend any sufferer to give your treatment a trial, as one of the best and safest remedies for similar nervous disorders.—Yours faithfully, G. Harris.
Messrs. J. L. Pulvermacher & Co., 194, Regent-street, W.

GALVANISM *v.* EXTREME NERVOUS DEBILITY.
Moss Side, Manchester, October 6th, 1887.
Dear Sir,—I hope you will excuse me not sending you word sooner of the wonderful benefit which I have derived from wearing one of your Galvanic Chain Belts. I was suffering from extreme nervous debility which no medicine could cure, and my sister wearing one of your belts for sciatica, from which she derived much benefit, I determined to try one for my complaint, and soon found it wonderfully efficacious in my case, since which time I have married and have now two as fine children as any parents would wish to see. I have recommended your Belts to several of my friends, some of whom are now trying your treatment.
You can make any use you like of this letter, reserving my full name and address, except on application.—Yours respectfully, R. C.
Mr. J. L. Pulvermacher, 194, Regent-street, W.

GALVANISM *v.* NERVOUS DEPRESSION.
13, Bute-street, South Kensington, 3rd October, 1887.
Dear Sir,—I am pleased to tell you that your Galvanic Belt has quite removed the nervous depression from which I was suffering, and I can confidently recommend your treatment for nervous weakness and debility.
Yours truly, D. Brider.
J. L. Pulvermacher, Esq., 194, Regent-street, W.

GALVANISM *v.* NERVOUS WEAKNESS and PAINS IN THE BACK.
Newbridge-road, Bath, 24th September, 1887.
Dear Sir,—I have pleasure in stating that I have derived much benefit by wearing one of your Galvanic Belts. The pains in my back and waist have quite left me, and my nerves are altogether stronger, and my case was one of many years' standing.—Yours faithfully, M. James.
J. L. Pulvermacher, Esq., 194, Regent-street, W.

GALVANISM *v.* NERVOUS DEBILITY and WEAK HEART.
142, Grange-road, London, S.E., Sept. 21st, 1887.
Gentlemen,—You will be pleased to hear that the Galvanic Belt I bought of you for my son has acted quite satisfactorily.
You may remember that my son suffered from nervous debility, with pain in the head and heart; but I am happy to say he is now well again, and I write you this in gratitude.—Yours obediently, (Mrs.) A. Griffiths.
Messrs. J. L. Pulvermacher & Co., 194, Regent-street, W.

GALVANISM *v.* NERVOUS EXHAUSTION.
The distressing symptoms of Nervous Exhaustion and Debility are speedily removed by means of PULVERMACHER'S world-famed GALVANIC BELTS, which are so arranged as to convey a powerful electric current direct to the affected parts, gradually stimulating and strengthening all the nerves and muscles, and speedily arresting all symptoms of waste and decay.

ADVICE PERSONALLY or by LETTER, free of charge.

FOR FURTHER TESTIMONIALS, both Medical and Private, see new Pamphlet, "GALVANISM: NATURE'S CHIEF RESTORER OF IMPAIRED VITAL ENERGY," post free on application to

J. L. PULVERMACHER AND CO.,
GALVANIC ESTABLISHMENT,
194, REGENT-STREET, LONDON, W. (nearly opposite Conduit-street).

E. F.—To harden the gums use a little tincture of myrrh, added to tepid water, and wash the mouth with this twice or thrice daily; or use Dr. Pierre's Eau Dentifrice.

Nose.—We should not advise you to attempt to alter the shape of your features by any such contrivance as that you name. All such attempts are certain to end in failure, and to make the condition in question more unsightly than ever.

Thomas Greig.—Use Sanitas Disinfecting Powder and the Fluid freely. Wash the woodwork with Sanitas Soap.

Youth.—For growth of the moustache or hair, you will find the following useful:—Liquor ammonia (strong); chloroform and oil of jasmine, of each, half an ounce; castor oil, half a drachm; spirits of rosemary, to make up four ounces. To be kept in a stoppered bottle, and labelled, "A little to be rubbed into the hair in the morning." Use, also, a little of an ointment composed of Lanolin, two drachms; and oil of jasmine, half a drachm. Rub this into the parts at nights, so as to prepare them for the lotion in the morning.

Liverpool Lad. — Try the effect of taking twenty drops of Cascara Cordial or Squire's Elixir of Cascara (413, Oxford-street, London, W.) in water, once daily, an hour before your food. Let your food be very light. Take little solid food, and subsist on strong soups made with Brand's Beef Essence; eat Malted (Montgomerie's) Bread; white boiled fish; and drink milk diluted with Vichy Water. Rest after your meals is absolutely necessary.

Ethelbert.—Apply to the part (on a small piece of lint, so as to reach the sore place) a little Iodoform Ointment, made by adding one part Iodoform to nine parts benzoated lard. Wash the parts morning and night carefully with Iodoform Soap.

Granville S.—Press out the blackheads with a watch-key or your finger-nails, and, thereafter, sponge the face with Eau de Cologne or Toilet Vinegar. Blackheads result from defective skin-action, and are merely filled-up skin-ducts. See article on this subject in Health, No. 199. Take hot baths regularly, and use Iodoform Soap. Avoid fatty foods, pastry, salt meats, &c., and let your diet be simple in character.

L. Porter.—Razor-paste, according to a recipe already given in our columns, is made as follows:—Mix fine emery intimately with fat and wax until the proper consistency is obtained in the paste, and then rub it well into the leather strop. Prepare the emery by pounding thoroughly in a mortar the coarse kind, throwing it into a large jug of water, and stirring well. Immediately the large particles have sunk, pour off into a shallow plate or basin, and let the water evaporate. Another receipt is, levigated oxide of tin, prepared putty powder, one ounce; powdered oxalic acid, quarter ounce; powdered gum, twenty grains; make into a stiff paste with water, and evenly and thinly spread it over the strop. With very little friction this paste gives a fine edge to the razor, and its efficiency is still further increased by moistening it.

Netta G.—The following lotion is to be used for the hair:—Bay rum, two ounces; glycerine, two ounces; tincture of cantharides, one drachm; oil of bergamot, half a drachm; sulphate of quinine, ten grains; water, four ounces. To be used every morning, and to be rubbed into the roots of the hair, all other oils and pomades being avoided. Use a soft brush only, and wash the hair once in a week or ten days, at night, with Iodoform Soap and tepid water. Keep the hair short for a time.


## TIMELY RESCUE OF A CHILD.

*From the "Redcar Gazette."*

The following interesting facts regarding the timely rescue of a child have just been brought to light, and are made public by due authority of the father of the little child, who is Mr. W. H. Haw, the well-known baker and grocer of Redcar, and whose place of business is at 23, High-street. We may add that the publishers of this paper, being familiar with the facts, are in a position to personally vouch for the entire accuracy of the particulars given. As the incident is no doubt of decided importance to parents, we gladly become the medium of bringing it to the notice of the public.

Some little time ago the young daughter of Mr. Haw became the victim of an acute bodily affliction of a rheumatic nature, which attacked the arms and legs of the child, so that these became alarmingly swollen and painful. Notwithstanding the steps which were taken to relieve the little sufferer, her case became so serious that she not only was confined to her bed, but was unable to turn her body from one side to the other. At this critical point, everything having failed, Mr. Haw remembered having read in the *Redcar and Saltburn Gazette* regarding a medical discovery which it was claimed possessed almost magical power to drive away pain. He procured a bottle of the same, and made an application in accordance with the directions. To his agreeable surprise and satisfaction, the pain and swelling began to disappear immediately, and in the astonishingly short space of twelve hours the child could walk across the room, and when only three applications had been made, the pain and swelling had entirely left her, and she is now quite well. Mr. Haw very aptly remarked that a remedy possessing such wonderful power as St. Jacob's Oil, which is the article used on the child, should be made known by every legitimate means, as by its use no doubt untold suffering would be avoided.

While the foregoing doubtless confirms what has been said and published recently with reference to the marvellous pain-banishing and healing properties of this wonderful Oil, our attention has been drawn to a still more startling case than that above referred to, and the facts of which have likewise been carefully substantiated. Mr. George C. Collins, of Newman-street, Oxford-street, London, writes:—"I desire to acquaint you with the marvellous recovery of my mother, aged fifty-seven, who resides in Berwick, Wilts, and who for many years has been a helpless cripple from rheumatism. She was unable to move without assistance, and continually suffered pain, much of the time enduring the most intense agony. Her hands were swollen to such an extent that she had not been able to see her knuckles for a long time. Her feet likewise had become quite deformed. During her long suffering she had tried many things without obtaining any relief, and she gradually grew worse, until she, as well as I, had given up all hope of her ever regaining her health. Hearing recently some of the wonderful accounts of how St. Jacob's Oil cured pain, I procured a bottle, little expecting she would derive much, if any, benefit from its use. But, incredible as it may seem, after the very first application of this surprising Oil, she could walk about without feeling any inconvenience, and the swelling of her hands had become so far reduced that they began once more to assume their natural shape. Continuing the applications, she was in a few days able to walk as well as ever she could, and without experiencing any pain whatsoever. She also regained the free use of her hands, and she is, in fact, entirely cured, for she has had no return of the trouble. She is to-day a well and strong woman, and her cure is solely due to three bottles of St. Jacob's Oil, which, to quote the old adage, has certainly shown in my mother's case that it is worth its weight in gold. She desires me to say that she regards it as the most wonderful thing in the world, and you are quite at liberty to make what use you like of what I have written."

Facts like these must convince even the most sceptical and prejudiced of the immense value of the medical discovery referred to, and the public will agree with the proprietors that there can be nothing unbusiness-like in their advertising its astonishing merits to the world.—[2308.]


Pebble.—We cannot recommend any such treatment, because it professes to cure a disease which can only be cured by an operation. Consult a good surgeon.

Poor Scottie.—What do you require a remedy for? If you will be more explicit in your request, we shall do our best to help you.

F. Goodwin.—For the constipation from which you suffer (and which must be first of all corrected) note and follow advice given to "Fortuna Favet" in Health, No. 236. For thread-worms, use injections of cold tea or one of perchloride of iron (half an ounce to a pint of water); look to the quality of the water you drink, avoid uncooked vegetables, and take plenty of salt with your food.

Pivot.—Try thirty grains bromide of potash, taken in a wineglass of water at bedtime.

Anxious.—Rest after your meals regularly, and take five drops Pure Terebene (Burroughs, Wellcome & Co.'s) on a piece of sugar after your meals when flatulence troubles you. Avoid much vegetable food for a time. Write again, if not bettered.

Toby.—It is difficult to account for the symptom you name; it may depend on many varied conditions of body, but most frequently on some lack of bodily tone. When again troubled, we advise you to try a vegetable dietary; avoid butcher meat; take white boiled fish. Bokö1 to dinner will aid you, and apply the following ointment to the affected parts night and morning:—Resorcin, one drachm; lanolin, vaseline, zinc oxide and powdered starch, of each two drachms. Mix, to form a paste.

An Anxious One.—1. Certainly not; the alcohol ordered could have nothing to do with the attack. 2. We should suggest, if possible, wintering in one of your mild Clyde resorts (*e.g.*, Rothesay) first of all, with simple nourishing food for diet—Brand's Beef Essence should be freely given; with Bokö1 (see advertisement in our pages) to dinner; while a dessertspoonful of Scott's Pure Cod Oil Emulsion should be taken thrice daily after meals. Write again if we can be of further service.

Plomb.—Try Bunter's Nervine, obtainable at any chemist's.

Leo.—An asbestos gas-fire, with free chimney-ventilation, is the best plan in our opinion.

A. Yeardley.—The fasting is the important point after the draught has been taken. There might be no objection to giving some milk and bread, or milk alone in the morning.

G. F.—Try Howie's Filter (advertised in last week's Health); that you are using is utterly ineffective.

CHARLES M.—Woodward's Gripe Water should be given to the child as directed on the bottle. It is perfectly safe and contains no opium.

A. MEIKLE.—Messrs. Ward, Bradford, are the makers of the wool clothing we recommend.

DENT.—Try a lotion made by adding a few drops of tincture of myrrh to a wine-glass of water, or use Dr. Pierre's Eau Dentifrice. You should consult a dentist.

H. F. — Yes; try the Cordial or the Cascara Elixir, of Squire, 413, Oxford-street, London, W. In our opinion, its use—along with appropriate diet—would be beneficial.

INQUIRER.—1. Painting with tincture of iodine daily, till the skin becomes tender, and taking internally Thomson's Cod Liver Oil Cream, advertised in our pages. 2. We have never heard of the water you name. What is it? 3. No form of mercury should ever be used save under medical direction.

SOFT WATER.—The water supply of the town you name is good, and not excessively hard. Maignen's Anti-Calcaire or Lipscombe's means for softening water are both excellent. Over-hard water is certainly injurious to health.

G. L. CLARK.—The closet you have in use is a very bad type. You cannot expect to possess a healthy house with such an inlet for foul and sewage gases. Replace it by one of Twyford's "Unitas" Closets (advertised in our pages), which is simple, cleanly, safe, and not liable to get out of order.

BRUNO.—Avoid constipation by the use of Scott's Midlothian Oat Flour (in place of tea and coffee) and by a vegetable dietary

TOOTH-ACHE
CURED INSTANTLY BY
BUNTER'S
NERVINE

Prevents Decay. Saves Extraction. Sleepless Nights Prevented. Neuralgic Head-aches and all Nerve Pains removed by Bunter's Nervine.
All Chemists, 1s. 1½d.

BUNTER'S
DENTINE

Is the most Simple & Durable Stopping for Decayed Teeth.

One can easily prepare and place it in the cavity of the Tooth in a soft state, and in a few hours it becomes a perfectly hard and white Enamel, forming as it were a part of the original substance of the Tooth. All Chemists, 1s. 6d.


in greater part. Try also the plan of taking twenty drops Cascara Cordial in water once daily between meals. Drink Vichy Water regularly as a beverage, and give up all alcohol. When the symptoms leave you, take fifteen drops Fer Bravais in water, after your meals, thrice daily. If the symptoms fail to be relieved by the above treatment, you must see a physician, as there may be a local cause for your ailment.

J. H. E. H.—The acid certainly stains the clothes. There is no other plan than wearing (while under treatment) old garments, as the stain will not wash out.

S. P. Q. R.—Pulvermacher's is a reliable belt and is thoroughly genuine in that it produces powerful electrical currents. We therefore advise you to purchase one of Pulvermacher's belts.

C. PEARSON. — The best preventive treatment of rheumatism is, firstly, care in diet, avoiding alcohol and rich foods, but seeing that the food is of generous quality; and secondly, to clothe warmly in woollen underclothing all winter. Messrs Ward, of Bradford, are the makers of the Sanitary Woollen Clothing we recommend you to wear. Many correspondents have warded off rheumatism by attention to the above details.

JAR.—The adulteration you name is not at all usual. It would scarcely pay to adulterate the meal as you suggest. Buy your meal of a respectable house.

LONGFIELD. — 1. You evidently forget what you asked us in your former query. You asked respecting the composition of a certain substance used for the relief of voice and chest-ailments. We advise you to deal with Coles or any respectable surgical instrument maker. 2. See advice given to "Richard Strong" in HEALTH, No. 237. Use a soft brush only for the hair, and avoid all hard and small combs.

G. ST. CLAIR.—You do not require to use any such tonic. As far as we can judge from your letter, you seem to need only fresh air, out-door exercise, and attention to diet, as indicated in the pamphlet. Try fifteen drops Fer Bravais in water, after meals, thrice daily.

C. J. K.—Your condition is certainly not quite natural, but, at the same time, not uncommon. Any surgeon will set your mind at ease, and probably no operation will be necessary. Therefore, consult a surgeon.

A TROUBLED ONE.—What you name is by no means uncommon. We advise you to be very moderate, for a time, in the exercise you name. Bathe the parts with cold water each morning. Read the pamphlet, "A Lecture to Young Men" (post free for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and follow out the directions it gives regarding diet and tonics. A Pulvermacher's Belt would be likely to do you much good, if the ordinary diet and tonic remedies indicated in the pamphlet do not suffice. Write again, if not cured.

C. CHEERY.—1. Try Bayley's Remedies for piles, 17, Cockspur-street, Pall Mall, London, S.W. 2. About twenty or twenty-one. 3. We recommend you to use a Howie's Filter.

CANARY. — Read the pamphlet (price 1s. 1d., post free) on "Grand Canary as a Health Resort," by Dr. Douglas, just published by Messrs. Churchill, 11, New Burlington-street, London, W.


SCOTT'S
EMULSION
OF PURE COD LIVER OIL
AND HYPOPHOSPHITES

Is three times as efficacious as the plain Oil.

It is almost as palatable as milk.

It does not nauseate or produce a loathing for food like the plain oil.

The Hypophosphites and Oil are so skilfully combined, that they are much more potent in building up flesh and strength than if taken separately, and SCOTT'S EMULSION is to-day the best remedial agent for the cure of

CONSUMPTION, CHRONIC COUGHS, BRONCHITIS, ANÆMIA, WASTING DISEASES OF CHILDREN and GENERAL DEBILITY.

Physicians universally prescribe it in preference to the plain oil, having seen its remarkable curative effects.

*Any chemist can supply it at 2/6 and 4/6.*

FIRST ESTABLISHED 1825.
NEAVE'S FOOD
FOR
INFANTS, THE AGED & INVALIDS.
The Best and Cheapest Farinaceous Food.

LANCET.—"Carefully prepared and highly nutritious."

BRITISH MEDICAL JOURNAL—"Well adapted for Children, Aged People, and Invalids."

IN ONE-POUND CANISTERS,
ONE SHILLING EACH.
SOLD EVERYWHERE
WHOLESALE OF THE MANUFACTURERS

J. R. NEAVE & CO., FORDINGBRIDGE, ENGLAND.

ESTABLISHED OVER SIXTY YEARS.

**PULLARS' DYE-WORKS, PERTH.**

By Appointment to Her Majesty the Queen, 1852.

J. PULLAR & SONS intimate that in their Works there is every convenience and appliance for Cleaning and Dyeing in the best style the varied and expensive materials in use for Ladies' and Gentlemen's wear, as well as for Household purposes. They direct attention to the superiority of their workmanship, and to the regularity and speed with which articles are returned.

RECEIVING OFFICES IN
LONDON { 18, CHENIES-STREET, W.C.
8, SLOANE-STREET, S.W.
64, FINSBURY-PAVEMENT, E.C.
BRIGHTON—152, WESTERN-ROAD.
*And Agencies throughout the Kingdom.*

Addresses and large Catalogue Post Free on application to PULLARS' DYE-WORKS, PERTH.

COMPLETE ARRANGEMENTS FOR THE PARCEL POST.

# "Fer Bravais" The Best Tonic.

**INVALUABLE FOR GENERAL WEAKNESS OR DEBILITY.**

*LANCET.*—"*Colloid hydrate*" *of iron.* "*Neutral and tasteless solution.*" "*A beautiful and interesting preparation.*"

*BRITISH MEDICAL JOURNAL.*—"*A remarkably valuable preparation.*" "*Has all the good effects of iron without producing constipation or disturbing the digestion,*" *and* "*does not blacken the teeth.*" "*An eminent London Physician writes to us,* 'I HAVE TRIED IT EXTENSIVELY, AND HAVE GIVEN IT IN CASES IN WHICH NO OTHER FORM OF IRON COULD BE TAKEN. IT IS *the best preparation of iron* I HAVE MET WITH.'"

*LONDON MEDICAL RECORD.*—"*Tasteless, free from styptic character, a most energetic preparation—the beau ideal of a ferruginous tonic.*"

Sold by all the principal Chemists and Druggists, in Bottles in portable Card Cases, with Drop Measure complete, sufficient for six or three weeks' treatment. Prices, 4s. 6d. and 3s. per Bottle, respectively.

# EDWARDS' REAL ARABIAN REVALENTA.

## A NATURAL FOOD.

The Best to Promote Health, to Prevent Indigestion and Constipation.

FIRST INTRODUCED BY US IN 1849.

THE REAL ARABIAN REVALENTA is *not a Medicine*, but is a very nutritive farinaceous food, prepared from an Arabian plant, and it has obtained a wide celebrity, on account of its valuable soothing effect, when used as a daily food in cases of Constipation, Dyspepsia, and all other affections of the digestive organs, whether resulting from residence in an unhealthy climate, debility, or peculiarities of constitution. In all such cases its use will fully and completely restore the digestive organs to a vigorous and healthy tone, *in a more speedy and permanent manner than by any other means.*

*May be had of all Chemists, &c., at 1s. per lb.; 3 lb. for 2s. 6d.*

Or a 12-lb. canister will be forwarded, carriage paid, to any railway station in England, on receipt of a Post Office Order for 10s., by the Manufacturers—

## EDWARDS, KITCHING, & CO.,

**50, HOLLAND-STREET, BLACKFRIARS-ROAD, LONDON, S.E.**

# TOWLE'S

# Pennyroyal & Steel Pills

*FOR FEMALES*

Quickly correct all irregularities and relieve the distressing symptoms so prevalent with the sex. Boxes, 1s. 1½d. and 2s. 9d., of all Chemists. Sent anywhere for 15 or 34 stamps, by

THE LINCOLN & MIDLAND COUNTIES DRUG CO., LINCOLN.

BEWARE OF IMITATIONS.

GREAT BODILY STRENGTH.—PEPPER'S QUININE AND IRON TONIC.—By infusing new life and strengthening the muscular system.

GREAT NERVE STRENGTH.—PEPPER'S QUININE AND IRON TONIC braces up the nervous system, and increases the strength of the pulse.

GREAT MENTAL STRENGTH.—PEPPER'S QUININE AND IRON TONIC, by its supporting influence on the body and nerves, repairs the ravages caused by over-taxing the brain power.

GREAT DIGESTIVE STRENGTH.—PEPPER'S QUININE AND IRON TONIC strengthens the stomach, stopping sinking sensations, removes indigestion, heartburn, palpitation, &c. Bottles, 16 doses, 2s 6d.; next size, 4s. 6d. Sold everywhere. Insist on having PEPPER'S.

PEPPER'S TARAXACUM and PODOPHYLLIN. A fluid combination for derangement of the liver, particularly when arising from slight congestion. By gently stimulating the action of the liver and slightly moving the bowels, the heavy drowsy feeling, headache, pain beneath the shoulders, at the chest after eating, unpleasant taste in the mouth, and manifold other indications of dyspepsia, are removed. Bottles, 2s. 9d. Sold by all chemists.

"SULPHOLINE LOTION."—Clears off all imperfections in a few days. Spots, Blemishes, Irritating Objectionable Appearances, Redness, Roughness, Tan, Uncomfortable Skin Disfigurements, &c., however obstinate, entirely fade away, leaving the Skin smooth, transparent, supple, natural, and healthy. Perfectly harmless. Sulpholine is delightfully fragrant, cooling and refreshing; counteracts effects of weather, softens, and preserves. Bottles, 2s. 9d Sold everywhere.

LOCKYER'S SULPHUR HAIR RESTORER is the safest and best. In a few days it gradually deepens grey hair to a perfectly natural shade. Lockyer's surpasses the effect of costly washes. Never disappointing. Guaranteed harmless. Large bottles, 1s. 6d. Sold everywhere.

## MASSAGE.

DR. STRETCH DOWSE continues his Lectures and Demonstrations on Massage and Galvanism carrying certificate of competency. — Apply, Secretary, 14, Welbeck-street, Cavendish-square.

BOTTLES 2/6 **ANTI-CATARRH** BOTTLES 2/6

DR. BIRLEY'S ANTI-CATARRH.—A wonderfully efficacious remedy for Colds of every kind; Influenza, Catarrh or Cold in the Head, Sore Throat, and all attacks resulting from a cold or chill. Absolutely harmless and extremely pleasant to take. Order through any Chemist, &c., or direct from the Proprietors E. BIRLEY & Co., 1, Cecil Street, Strand, London.

# WHAT IS THIS DISEASE THAT IS COMING UPON US?

LIKE a thief at night, it steals upon us unawares. Many persons have pains about the chest and sides and sometimes in the back. They feel dull and sleepy; the mouth has a bad taste, especially in the morning. A sort of sticky slime collects about the teeth. The appetite is poor. There is a feeling like a heavy load on the stomach; sometimes a faint, all-gone sensation at the pit of the stomach, which food does not satisfy. The eyes are sunken, the hands and feet become cold and feel clammy. After a while a cough sets in, at first dry, but after a few months it is attended with a greenish-coloured expectoration. The afflicted one feels tired all the while, and sleep does not seem to afford any rest. After a time he becomes nervous, irritable, and has evil forebodings. There is a giddiness, a sort of whirling sensation in the head when rising up suddenly. The bowels become costive; the skin is dry and hot at times; the blood becomes thick and stagnant; the whites of the eyes become tinged with yellow. There is frequently a spitting up of the food, sometimes with a sour taste, and sometimes with a sweetish taste; this is frequently attended with a palpitation of the heart; the vision becomes impaired, with spots before the eyes; there is a feeling of great prostration and weakness. All of these symptoms are in turn present. It is thought that nearly one-third of our population has this disease in some of its varied forms. It has been found that medical men have mistaken the nature of this disease. The disease is Dyspepsia or Indigestion, for which Mother Seigel's Curative Syrup is a certain remedy.

Mother Seigel's Curative Syrup is for sale by all chemists and medicine vendors, price 2s. 6d. per bottle.

An Almanac, containing Testimonials from persons who have received benefit from the use of Mother Seigel's Curative Syrup, will be sent post free on application by the proprietors, A. J. White, Limited, 35, Farringdon-road, London, E.C.

Printed for the Proprietor by Henderson, Rait, & Spalding, at 3 and 5, Marylebone-lane, Oxford-street, in the Parish of Marylebone, in the County of Middlesex, and Published by Alexander P. Watt, at No. 2, Paternoster-square, London, E.C.